EFFECT OF PRIME VENDOR ON CUSTOMER SATISFACTION IN NELLIS AIR FORCE BASE MILITARY DINING FACILITIES

by

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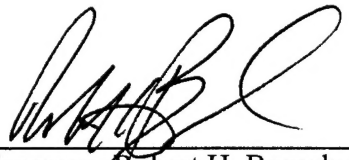

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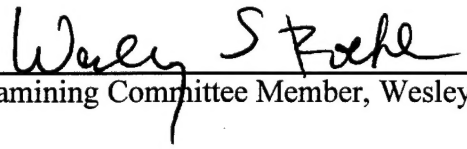

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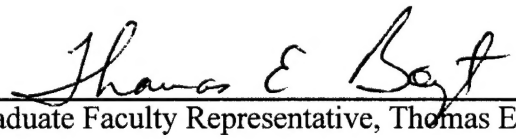

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ABSTRACT

The purpose of this study was to analyze the effects a change in the food delivery system at Nellis Air Force Base's military dining facilities had on customer satisfaction. 952 customer comment forms from Nellis Air Force Base's military dining facilities were collected and analyzed. First, ratings for the food variety, food taste, and food temperature categories were collected and coded. This data was then statistically analyzed using frequency analysis, descriptive analysis, cross tabulation, and a chi-square test to determine if ratings in these areas had changed due to the change in food delivery system.

Next, written remarks from all 952 comment forms were collected to test whether a change in the number of written remarks had occurred due to the change in food delivery system. Content analysis on this information was done using a hybrid between the contextual and a priori approaches to content analysis. Results of the statistical analysis showed that "Excellent" ratings on all variables increased by at least 10 percent after the change in food delivery system. Results of the content analysis showed that the number of negative written comments made concerning food availability and overall food service decreased by at least 10 percent after the change in food delivery system.

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CHAPTER 1

INTRODUCTION

In September 1996, the United States Air Force (USAF) changed its food delivery system. What had once been managed strictly by government agencies since the early 1950's was now being contracted out to private sector food service distributors. While the government still maintains responsibility for all food service operations, private sector food service distributors perform all food delivery system functions. This change was expected to be the food service quality initiative that would bring military food service up to the same level as its civilian counterparts.

Four years of experience as a Food Service Officer (FSO) for the USAF gave the researcher first-hand experience in the strictly government-operated food delivery system. Poor food quality, large quantities of not-in-stock items, and bureaucratic delays for food orders all contributed to a poor food service environment during those four years. It was the researcher's contention that the food delivery systems of private sector food service distributors would positively impact customer satisfaction levels in USAF dining facilities worldwide by providing better quality food items, faster delivery times and increased food item variety. Initial indications from food service operations on military

installations that made the switch to private sector food service distributors support the researcher's position (DOD Food Inventory, 1993).

This study intended to accomplish two things: (a) determine whether a positive change in customer satisfaction occurred due to a change in food delivery systems, and (b) validate the USAF's decision to implement the use of private sector food service distributors in their new food delivery system. Throughout the remainder of this paper, Prime Vendor, the name of the privatized material-procurement program utilized by the Department of Defense (DOD), was used to reference the use of private sector food service distributors in the military's new food delivery system.

To test whether the new food delivery system caused a change in customer satisfaction, customer satisfaction levels at Nellis Air Force Base (Nellis AFB), Las Vegas, Nevada, dining facilities were examined. Implementation of Prime Vendor at Nellis AFB occurred during September 1996. Customer satisfaction levels were determined from the customer comment cards used at Nellis AFB dining facilities. Comment cards from September 1995 to July 1996 were used to establish a pre-Prime Vendor customer satisfaction benchmark, while comment cards from September 1996 to February 1997 were used to determine post-Prime Vendor customer satisfaction.

Problem Statement

The purpose of this study was to analyze the effects privatization of the military's food delivery system had on customer satisfaction in Nellis AFB military dining facilities.

Delimitations

As a major component of this country's DOD, the USAF had a broad area of responsibility. Exploitation of air and space, anywhere, anytime, was the USAF's motto. In order to do this, a large number of military bases were located worldwide. Where there were military bases, there were usually military dining facilities. Because of the USAF's worldwide responsibility, a number of delimitations were placed on this study:

1. Only one United States Air Force military dining facility was examined.
2. There were three military dining facilities on Nellis AFB.
3. Only comment forms from September 1996 through February 1997 were used to determine customer satisfaction levels with the private food distributor.
4. Comment forms from the past year (September 1995 to July 1996) were used for the historical data portion of the study.
5. A 30 percent surcharge for all cash-paying customers of military dining facilities went into effect around the same time as the food distribution system change.

Limitations

The highly transient lifestyle of military personnel contributes to this study's limitations in two ways:

1. The investigator's reassignment date was 15 June 1997. Therefore, projected completion date for this study was May 1997.

2. Some customers whose comments were contained in the historical data may not have been assigned to Nellis AFB during the time period of the study.

3. Comment forms from August 1996 were not available to the researcher.

Assumptions

Assumptions for this study were:

1. Quality of food from Prime Vendor distributors would be higher than government-issue food items.

2. Given the above, customers at Nellis AFB's military dining facilities would notice a change in food quality.

3. The number of customers utilizing Nellis AFB's military dining facilities have remained, and would remain, fairly stable.

4. Average number of customer comment cards received by Nellis AFB's military dining facilities were reasonably constant over the past five years.

5. Past and present customers of Nellis AFB's military dining facilities were similar to each other.

Definitions

Troop Support - government-operated food delivery system.

Prime Vendor - privately-operated food delivery system.

Department of Defense (DOD) - department in charge of security and defense of the United States of America (USA).

Defense Logistics Agency (DLA) - agency in charge of all procurements for DOD. Managed four food warehouses and hired contractors to operate 21 others across the USA (Frozen Food Age, 1993).

Defense Personnel Support Center (DPSC) - Part of DLA that purchased more than 90 percent of the food provided to troops on military installations in the USA and overseas. Also provided food to non-DOD customers such as the Department of Veteran Affairs medical centers and federal prisons (Frozen Food Age, 1993).

Military Installation - any base, post, or ship that housed military personnel and conducted military operations.

Flight Kitchen - military dining facility responsible for preparation of in-flight meals for both passengers and flight personnel.

Storeroom - area where all military dining facility's food supplies were stored.

Military Dining Facility - any facility on a military installation that served food to authorized active duty military customers, including, but not limited to, dining halls (chow halls) and flight kitchens.

Food Service Officer (FSO) - military officer in charge of all military run dining

facilities (dining halls and flight kitchens). Not responsible for privately run restaurants or clubs.

Government Accounting Office (GAO) - investigative arm of Congress charged with examining matters relating to the receipt and disbursement of public funds. GAO fulfilled this duty by performance of audits and evaluations of government programs and activities (United States General Accounting Office, 1997).

International Foodservice Distributors Association (IFDA) - international trade association comprised of food distribution companies that served independent grocers and foodservice operations around the world (Food Distributors International, 1997). Lobbied for privatization of the military food distribution system and recently changed name to Food Distributors International during the time of this study.

Food Delivery System - system used to purchase, order, and distribute food supplies to military installations.

Semiperishable Items - food items such as canned goods that did not require refrigerated storage space.

Perishable Items - food items such as fresh fruits and vegetables, meats and dairy products that required refrigerated storage space.

Depot - large DOD warehouses used to store semiperishable food items (DOD Food Inventory, 1993).

Defense Subsistence Office (DSO) - DLA owned and operated warehouses used to store perishable food items (DOD Food Inventory, 1993).

Base Warehouse - warehouse located on each military installation used to store

semiperishable and perishable food items for all military dining facilities located on that military installation. See also Troop Support.

Permanent Change of Station (PCS) - reassignment of military personnel from one military installation to another.

Initial Inspection Test Date - date placed by food producers on food items to indicate when product quality would deteriorate (DOD Food Inventory, 1993).

Single Manager - military branch assigned to buy, store, and issue supplies, manage inventories, and forecast requirements for common supplies used by each military branch. For example, the Army served as the single manager for food, thereby handling all food transactions needed by not only the Army, but the Air Force and Navy as well. The single manager system was used from the early 1950's until 1961, when DLA was created to consolidate all single managers into one agency (DOD Food Inventory, 1993).

Local Purchase Item - low demand food items that DPSC cannot purchase under volume discount contracts (DOD Food Inventory, 1993).

War Reserve Stocks - food items stored by DOD for use during wartime only.

Indefinite Quantity Contracts - contracts that set minimum and maximum numbers of items to be purchased at pre-set prices. These types of contracts allow order placement and delivery to occur as needed (DOD Food Inventory, 1993).

Indefinite Delivery Contracts - contracts that state estimated quantities of food items to be purchased within a specific time period (DOD Food Inventory, 1993).

Basic Daily Food Allowance (BDFA) - a complex food price index that contained specified quantities of 53 food items. BDFA value was computed by multiplying the quantity of each food item contained in the food price index by the current DPSC food item price (GAO Report B-205125, 1981).

Supply Availability - prior system of measuring depot and DSO effectiveness. A favorable assessment occurred when supplies were immediately available at the time of request.

Federal Acquisition Regulation (FAR) - a 1,600 page document that outlined procedures necessary for procurement of items by the United States Federal Government (Peters, 1996).

Oral Proposal - process in which individual contractors were given a set amount of time to explain why their company would be the best one to select for a specific job (Peters, 1996).

Draft Bid Solicitations - process in which individual contractors were asked to critique the feasibility of a contract's statement of work (Peters, 1996).

Statement of Work - specifics on how work would be completed under a government contract.

Universal Product Number (UPN) - a unique code used by DOD to identify particular products and supplies (Scott, 1996).

Contracting Officer - military officer responsible for all contracts awarded to private sector contractors at their military installation.

Military Grade - rank/title associated with each military person. The military grades, and respective ranks, for both enlisted and officer personnel in the USAF were listed below (Air Force Pay Chart, 1997).

Enlisted Grade (Rank)	Officer Grade (Rank)
E-1 (Airman Basic)	O-1 (Second Lieutenant)
E-2 (Airman)	O-2 (First Lieutenant)
E-3 (Airman First Class)	O-3 (Captain)
E-4 (Senior Airman)	O-4 (Major)
E-5 (Staff Sergeant)	O-5 (Lieutenant Colonel)
E-6 (Technical Sergeant)	O-6 (Colonel)
E-7 (Master Sergeant)	O-7 (Brigadier General)
E-8 (Senior Master Sergeant)	O-8 (Major General)
E-9 (Chief Master Sergeant)	O-9 (Lieutenant General)
	O-10 (General)

Close-ended Question - any question where customers were asked to choose their response from a provided list of responses (Babbie, 1990).

Air Combat Command (ACC) - major command of USAF responsible for providing air combat forces towards national defense (Air Combat Command, 1997). Nellis AFB is responsible to ACC for their operational actions.

Subsistence-in-kind (SIK) - customers of military dining facilities who are able to eat up to three meals per day, at government expense.

Hypotheses/Research Objectives

HØ: Customer satisfaction levels at the Nellis AFB military dining facilities would remain the same after a private sector food service distributor commenced operations.

HA: Customer satisfaction levels at the Nellis AFB military dining facilities would change after a private sector food service distributor commenced operations.

H_1: Ratings on food variety survey items at Nellis AFB military dining facilities would remain the same after a private sector food service distributor commenced operations.

HA_1: Ratings on food variety survey items at Nellis AFB military dining facilities would change after a private sector food service distributor commenced operations.

H_2: Ratings on food taste survey items at Nellis AFB military dining facilities would remain the same after a private sector food service distributor commenced operations.

HA_2: Ratings on food taste survey items at Nellis AFB military dining facilities would change after a private sector food service distributor commenced operations.

H_3: Ratings on food temperature survey items at Nellis AFB military dining facilities would remain the same after a private sector food service distributor commenced operations.

$\underline{HA_3}$: Ratings on food temperature survey items at Nellis AFB military dining facilities would change after a private sector food service distributor commenced operations.

CHAPTER 2

LITERATURE REVIEW

This chapter followed the progression of the military food delivery system from its DPSC roots to the food delivery system in use today. In order to accomplish this, a number of articles and reports were reviewed for content by the researcher. This chronological progression started with a brief background on how the military food delivery system was run by DPSC, and ends with a description of how Prime Vendor would be used in today's military food delivery system. A majority of the subheadings used in this chapter reflect the subheadings used in the 1993 General Accounting Office report, DOD Food Inventory: Using Private Sector Practices Can Reduce Costs and Eliminate Problems.

The USAF, like all of its sister services, fell under the authority of the DOD. Operations from national defense to food service were included under this blanket of authority. The Defense Logistics Agency (DLA), or one of its contractors, was responsible for purchasing necessary items for all of DOD's operations. The Defense Personnel Support Center (DPSC), a part of DLA, was responsible for purchasing the food items used to feed all military personnel.

DPSC purchased more than 90 percent of the food items needed to feed military personnel around the world. Prior to the implementation of Prime Vendor, DPSC purchased food from a variety of manufacturers, growers, packers and processors at a cost of more than $1.6 billion per year (Peters, 1996). These various suppliers then delivered their goods to one of 25 storage facilities across the country. Four of these storage facilities (depots) stored only semiperishable items. The remaining 21 storage facilities, called Defense Subsistence Offices (DSO), stored perishable items. Locations of these depots and DSOs can be seen in Figure 1.

Once food was received at either the depot or DSO, it was entered into the inventory system and then properly stored. All requests for items from either a depot or DSO went through DPSC first. Once DPSC had processed the request, it was passed on to the individual depot or DSO. After filling the request, items were transported to the base warehouse located on the military installation needing the food items. These food items remained stored in the base warehouse until the military dining facility needing it picked it up.

The main problem with this food delivery system was the incredibly large amount of time it took from start to finish. At the beginning of this process, military dining facilities estimated their food item needs 60 days before they needed them, and then turned these figures into their base warehouse. Known variables such as holidays, high volume permanent change of station (PCS) moves, and scheduled exercises/deployments were factored into this 60 day estimate. Unknown variables such as wartime deployments and inclement weather/natural disasters were not factored

Depots	DSO's			
1 = Tracy, CA	5 = Seattle, WA	11 = San Antonio, TX	17 = New Orleans, LA	23 = Philadelphia, PA
2= Mechanicsburg, PA	6 = Alameda, CA	12 = Fort Worth, TX	18 = Tampa, FL	24 = Bayonne, NJ
3= Richmond, VA	7 = Los Angeles, CA	13 = Kansas City, MO	19 = Jacksonville, FL	25 = Boston, MA
4 = Memphis, TN	8 = San Diego, CA	14 = Chicago, IL	20 = Columbia, SC	
	9 = Denver, CO	15 = Nashville, TN	21 = Cheatham Annex, VA	
	10 = El Paso, TX	16 = Birmingham, AL	22 = Landover, MD	

Figure 1. Map of Depot/DSO Locations

into the 60 day estimate, thereby possibly causing a shortage of food if these events occurred. Once the base warehouse received all food orders for the military installation, the order was then sent to the appropriate depot and/or DSO for their geographic region.

This request arrived at the depot and/or DSO not later than 30 days prior to when the food was needed at the base warehouse. This lag time was needed for delivery from the depot and/or DSO to the base warehouse, and in case the food items requested were not in stock (NIS) at the depot and/or DSO. If a food item was NIS at the depot and/or DSO at the time of request, it could take anywhere from 120 to 205 days until that food item could be procured, delivered, and received at the depot and/or DSO (DOD Food Inventory, 1993). A number of problems occurred because of this food delivery system.

In November 1980, DPSC mismanaged millions of dollars during the past two fiscal years. Because DPSC could not account for funds paid on past financial obligations, adjustments of almost $566 million were recorded during FY 1978 and FY 1979 (GAO Summary, 1980). Roughly one year later, the House Committee on Appropriations reduced budgetary authorizations for DOD food purchases because it felt food service management within DOD was poor. As a result, the GAO looked into DOD's food service management. Their report, DOD Food Service Program Needs Contracting and Management Improvements, focused on food service contract management, food item costs and inventories, and overall food service management. Recommendations contained in this report were to improve food service contracts in the

areas of uniform standards of work, measurable performance standards, documented inspection procedures, and fair remuneration for unacceptable contract performance (GAO Report B-205125, 1981).

Eight years later in 1988, the Chairman of the Subcommittee on Oversight of Government Management, Senate Committee on Governmental Affairs, became concerned that total inventory levels for DOD had increased $60 billion over the past eight years. As a result of this concern, the Government Accounting Office (GAO) was again asked to look into the problem. As opposed to their earlier report, GAO's task was to compare DOD's logistical practices with those of the commercial/private sector (DOD Food Inventory, 1993).

The first GAO report, Commercial Practices: Opportunities Exist to Reduce Aircraft Engine Support Costs, was published in June 1991 and focused on the logistical procedures of the aircraft maintenance industry. The second GAO report, DOD Medical Inventory: Reductions Can Be Made Through the Use of Commercial Practices, was published in December 1991 and focused on the logistical procedures of the healthcare industry. Both of these reports identified areas where DOD could improve the effectiveness and efficiency of their day-to-day operations by adopting private sector practices (DOD Food Inventory, 1993).

During Fiscal Year (FY) 1992, DOD reported that it cost almost $700 million to feed all United States military personnel stationed around the world (DOD Food Inventory, 1993). The DOD Supply System Inventory Report for FY 1992 indicated that food costs for the Army were $101,762,000, $56,389,000 for the Navy,

$35,389,000 for the Marine Corps, and $502,719,000 for the DLA. Food cost figures for the Air Force were not covered in this report (DOD Supply Report, 1992). In an attempt to reduce this cost, the GAO directed their focus on the food service industry. The GAO conducted its investigation of both military and private sector food service operations from January 1992 to January 1993. The formal report on their findings, DOD Food Inventory: Using Private Sector Practices Can Reduce Costs and Eliminate Problems, was published in June 1993 (DOD Food Inventory, 1993). In this report, the GAO identified three major areas that needed to be addressed: DOD's multilayered supply system encouraged large inventories and slow turnover, unnecessary costs experienced in DOD's military food supply system, and use of private sector practices demonstrated benefits for DOD (DOD Food Inventory, 1993).

DOD's Supply System Encourages Large Inventories and Slow Turnover

DOD's multilayered food delivery system maintained by DPSC can be seen in Figure 2 below. Under DPSC, depots and DSO's were measured on supply availability, not supply turnover or quality. To maintain a favorable supply availability rating, large inventories were needed (Peters, 1996). GAO investigators cited this practice as the primary reason for large inventories and slow turnover. At the end of FY 1992, depots had 82 days' worth of semiperishable food items; base warehouses were authorized to hold up to 45 days' worth of food; and military dining facilities, depending on the branch of service, could hold varying days' worth of food items. A

breakdown of each branches' inventory authorization (in number of days' worth of inventory on hand) are shown here: Air Force = 4-5 days, Army = 3 days, Navy (except ships) = 32 days, Navy (ships only) = 75-90 days. All of these inventories amounted to more than $350 million dollars at the end of September 1991 (DOD Food Inventory, 1993).

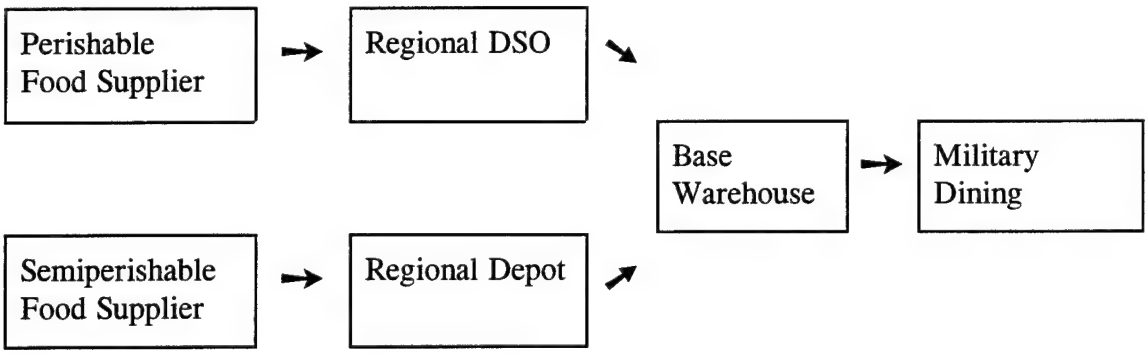

Figure 2. DOD's Food Delivery System.

Due to the large number of layers in DOD's food delivery system, turnover was quite low at each individual layer. GAO investigators found that the average turnover for semiperishable food items was less than twice per year, while average turnover for perishable food items was close to six times per year. Recommended turnover for food items is between 20 and 25 times per year (Stefanelli, 1992). In fact, turnover was so low in some areas that food items were found in inventory well past their initial inspection test date.

One specific example of this was found at Camp Pendleton, California, a United States Marine Corps installation. A box of canned peanut butter originally packed in June 1989 had an initial inspection test date of August 1990. The box of peanut butter was received at Camp Pendleton's base warehouse in March 1992, and delivered to the dining facility in May 1992. Even though DOD practices a "first-in, first-out"policy for its inventory, this box of peanut butter did not arrive at a military dining facility until almost three years after it had originally been packaged (DOD Food Inventory, 1993). According to Cinderella Foods, a provider of peanut butter to the United States Government, the suggested expiration date for their peanut butter is 12 months. After this time, peanut butter's quality and flavor become compromised. Although this drop in quality and flavor after 12 months makes for great animal food, it does not pose any health problems to humans (J. Sams, personal communication, March 10, 1997).

DOD's multilayered inventory system caused another type of problem also, redundancy. GAO investigators found that in most cases (all but two) where one military installation operated in close geographic proximity (less than five miles apart) to another, each military installation operated their own base warehouse. Duplication of this type only added to the already high levels of inventory found throughout DODs food delivery system (DOD Food Inventory, 1993).

Contrast this to a typical private sector food delivery system (Figure 3) and the difference can be observed as quite drastic. The private sector food delivery system was designed to deliver food items as efficiently and effectively as possible. This was done by keeping the number of layers in the food delivery system to an absolute

minimum. One distributor, which carried both perishable and semi-perishable food items, was all that stood between food suppliers and individual restaurants. In order to be profitable, these distributors had to be effective and efficient in all areas of their operation, or their customers would likely take their business elsewhere (Stefanelli, 1985).

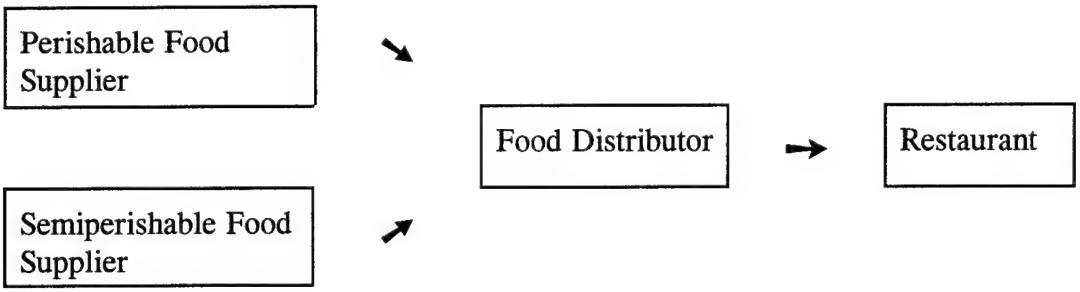

Figure 3. Private Sector Food Delivery System.

The average private sector distributor held only 30 days' worth of inventory, while individual restaurants held only a few days' worth of inventory on-hand. Average turnover rates for these distributors ranged from 12 to 52 times per year for semiperishable food items, and 37 to 104 times per year for perishable items. Summaries of turnover and delivery data can be seen below in Table 1.

Table 1

Comparison Between Military and Private Sector Food Distribution Practices

	Military	Private Sector
Inventory Turnover Rate (times per year)		
Semiperishable Food Items	2	12-52
Perishable Food Items	6	37-104
Out-of-Stock Occurrences (% of time)	1.3-3.4%	1%
Delivery Frequency (in days)		
To Depots	120-205	N/A
To Dining Facilities/Restaurants	30-60	1-3

Note. Adapted from Lorenzini, 1994.

Unnecessary Costs Experienced in DOD's Military Food Supply System

Not only did GAO investigators find that DOD's multilayered inventory system caused large inventories and unusually small inventory turnover, they found that unnecessary costs were incurred because of it as well. When the military food delivery system was developed in the early 1950's, the idea was to consolidate the management of all supplies commonly used by all branches of the military. For each type of supply (food, medical supplies, clothing, etc.) a "single manager" was given total responsibility for that supply item. It was decided that the United States Army would be the "single manager" for food (DOD Food Inventory, 1993).

In 1961, the Defense Supply Agency, which later became DLA, was created to centralize operations of all eight "single managers" throughout the military. "Single managers" were now known as supply centers under this new system. In 1965, the

supply centers used for food service operations were again combined, this time to be called DPSC. The process described earlier in this chapter had been used by DPSC to deliver food supplies for DOD since 1965.

About the same time that DPSC established their food delivery system for military dining facilities, private sector food distribution underwent a major change. Before the early 1960's, local food distributors specialized in only certain food items. Because of this, a number of food distributors were needed to meet the needs of all local restaurants. Early in the 1960's, however, local food distributors began carrying more expanded food item lines (DOD Food Inventory, 1993). Expansion continued well into the 1980's until most food distributors carried semiperishable and perishable food items, as well as supplies and equipment (Stefanelli, 1985).

Customers' dependence on these newly organized local food distributors completely changed the face of the food service industry. As reliance on local food distributors increased, restaurant operators no longer had to pay for storage, handling and transportation costs. Because of these additional operational costs, greater efficiency was necessary for food distributors' success. To achieve this greater efficiency, distributors: (a) delivered food orders to restaurants within three days of receiving an order, (b) provided automated ordering and inventory systems to customers, (c) tailored delivery schedules to the convenience of customers, and (d) located their facilities within 200 miles of their customers to lower costs (DOD Food Inventory, 1993).

When comparing costs between the two types of food delivery systems (military vs. private sector) it became apparent that private sector food distribution practices would benefit the military food delivery system. Distributors surveyed for the GAO's report stated that charges for their services would occur in one of two ways: (a) an ordering charge of $1.00 to $2.50 per case if DOD bought food items directly from the distributor, or (b) an 8 to 14 percent mark-up if the distributor were contracted to buy food for DOD (DOD Food Inventory, 1993).

On the other hand, determining costs under DOD's depot/DSO system was a bit more complex. At the start of the process, DLA published a catalog that listed prices for all food items available through DPSC. This catalog, published every three months, listed the cost of each food item charged to DLA by the food supplier, plus a surcharge that was supposed to cover miscellaneous costs incurred through delivering all food items to base warehouses around the world. A breakdown of this surcharge can be seen in Table 2 below (DOD Food Inventory, 1993).

GAO investigators found that DOD's "cost plus surcharge" method greatly understated total costs of operation by omitting key cost areas. First, cost of operating base warehouses were not reflected anywhere in the "cost plus surcharge" method. Second, while cost of transporting food items to base warehouses was included, the cost of transporting from the base warehouse to individual military dining facilities was not. In most cases, each military installation incurred the cost of the delivery truck, fuel and

Table 2

Cost Components of Military Dining Facility Surcharge (FY 1993)

Cost Component	Surcharge Percentage
DPSC and DSO Cost of Operations	8.4%
Transportation from Depot to Base Warehouse	3.6%
Depot Cost of Operations	3.2%
Transportation from Producer to Depot, DSO, or Base Warehouse	.6%
Depot or DSO Inventory Losses or Damages	.5%
Base Warehouse Inventory Losses or Damages	.3%
Total Amount of Surcharge	16.6%

Note. Adapted from General Accounting Office, 1993.

maintenance used for these deliveries, but these costs were not added into the cost of feeding personnel on that military installation. Finally, the amount of the surcharge remained the same, regardless of the items ordered or the distance from the base warehouse to the servicing depot/DSO. Due to these incomplete cost figures, no accurate cost amount could be placed on the military's food delivery system. Using the figures available, GAO investigators came up with an annual cost of more than $80 million in Fiscal Year 1993 (DOD Food Inventory, 1993).

Use of Private Sector Practices Demonstrated

Benefits for DOD

Before the Prime Vendor program was implemented on a large-scale basis, DOD used private sector food distributors for small-scale deliveries. To ensure

freshness, distributors were providing milk, bread, fruit, and other highly perishable items directly to military dining facilities. Distributors were also used to procure specialty items, local purchase items, and any other items not-in-stock at the regional depot/DSO. Even in these isolated situations, the cost, quality and customer service benefits were easily seen. Food items were delivered within 7 days of ordering, and any problems found with the order (spoiled, damaged or incorrect food items) were taken off of the bill and replaced the next day.

Recognizing that its inventories, and costs, were steadily growing, DOD enacted an inventory reduction plan in May 1990. This plan called for greater use of private sector inventory and delivery practices by all DOD agencies in order to reduce costs and improve overall supply system service. Specifically, DOD agencies were to "minimize the number of new items entering the supply system, reduce the number of items currently in the system, reduce the quantities of materials stocked, pursue commercial alternatives to stocking material, and improve material control and asset visibility" (DOD Food Inventory, 1993, 32). In order to achieve the plan's objectives, DLA published its own plan in April 1991 (DOD Food Inventory, 1993). Following that publication, DPSC issued its own plan in March 1992 (DOD Food Inventory, 1993).

Phasing Out of Depot Storage

Depot storage of semiperishable food items would be almost completely eliminated by the year 2000, according to DPSC's inventory reduction plan. Storage of

semiperishable items would only be allowed for war reserve stocks and those food items being shipped to overseas military installations after that time. To accomplish this goal, DPSC wanted producer deliveries to depots occurring six times per year, rather than the usual once or twice per year. There were no plans to phase out the use of DSO's for storage of perishable items at this time.

Purchasing Food Under Industry-Type Contracts

Contrary to normal military contracting procedures, DPSC intended to utilize more indefinite quantity and delivery contracts in their food delivery system. Normally, definite quantity and delivery contracts were used by DPSC to manage DOD's food delivery system. Under these types of contracts, set quantities were delivered at specific times throughout the year, whether the items were needed or not. This practice proved to be very inefficient because shipments had to be accepted and stored in their entirety at the time of delivery.

Indefinite quantity and delivery contracts, however, do not have any of these problems associated with them. These contracts allowed for fluctuations in both market price and demand of food items. As long as minimum requirements were met, and maximum requirements were not exceeded, individual military dining facilities could schedule the ordering and delivery of food items when they needed them, and not when they had to receive them. If military dining facility customers expressed a desire for Hunts ketchup one month, and then desired Heinz ketchup the next, utilization of

private sector food distributors allowed this to occur. Under the DPSC system, this scenario would be an impossibility (Stefansky, 1994).

Also, indefinite quantity and delivery contracts were not paid in full at the time the contract was awarded. A pre-determined percentage of the total contract amount gets paid at the time of the awarding of the contract, while the remainder gets paid out over the course of the contract.

Testing Direct Delivery to Military Installations

Combining the need for decreased depot storage, as well as increasing the use of indefinite quantity and delivery contracts, DPSC tested direct delivery of high-use food items to military installations. In mid 1992, DPSC set-up indefinite quantity contracts for flour and sugar at two of the larger military installations in the country. Minimum order size requirements were set, with any orders falling under this minimum still being handled by the depots. These test bases reported quicker delivery time and fresher products by using the indefinite quantity contracts (DOD Food Inventory, 1993).

Consolidating Procurement of Local Purchase Items

Local purchase items were found to be another cause of high costs in DOD's food delivery system. Standard operating procedure for local purchase item procurement was for base warehouses to buy needed food items from local food distributors as needed. If a food item was not-in-stock (NIS) the previous month,

chances were that the same item would be NIS the following month. Under this system, a new contract was negotiated with the local food distributor every month.

To remedy this problem, DPSC tested a new method in which local food distributors would be contracted to provide food items on a regular basis, while giving DOD a volume discount in the process. It was believed that private sector food distributors would not argue against these discounts, since they would be paid based on the volume going through their operation, not the prices they charged DOD (Purchasing, 1996). For this test, DPSC signed indefinite quantity contracts for concentrated beverage bases in high-use areas. So far, this test method has shown a reduction in prices ranging from 11 to 69 percent (DOD Food Inventory, 1993).

Automated Systems

The final DPSC initiative was to update DOD's computerized data exchange system. Upgrading the electronic data interchange capabilities between depots, DSO's, base warehouses, producers, and distributors would cost money, but should also yield many benefits. Expected benefits included lower inventory holding costs, lower food item prices, faster service, increased reliability, longer relationships with local food distributors, and just-in-time food item deliveries. These upgrades were anticipated to help implementation of the Prime Vendor program as well.

In order to speed up this process, the International Food Distributors Association (IFDA) offered to help with this computerized upgrade. IFDA believed that a standardized electronic database for all food items would provide benefits for

everyone involved. This standardized electronic database would incorporate all United States Department of Agriculture (USDA) and Food and Drug Administration (FDA) requirements, giving end-users better information on the food items being used in their facility. Government officials recognized the importance of this standardized database, and asked IFDA to help make it a reality by sharing what they already knew about such databases, thereby bringing the current government systems up-to-date (Foodservice Distributor, 1994).

DOD's first attempt at a standardized database was the Universal Product Number (UPN). DOD initiated the use of UPNs to save time and money in supply ordering and purchasing. Millions of dollars were wasted each year trying to identify products in the DOD supply system (Scott, 1996). As of July 1, 1996, any manufacturer or distributor that did not use a UPN in their operation would not even be considered for a government contract (Hospital Materials Management, 1996).

DOD Concerns with the GAO Report

As with any new idea, there were some DOD officials in favor of expanding the use of private sector food distributors, and there were some against the idea. Supporters of the idea cited the numerous benefits experienced by military dining facilities at test sites, and pushed for immediate DOD food delivery system reform. Opponents of the reform acknowledged the short-term benefits experienced, but had greater concerns over a total restructuring of the DOD food delivery system.

Military Specifications

Food items used in military recipes were measured and packaged in such a way that prevents easy substitution of commercial, brand-name items provided by private sector food distributors. For example, only one type of instant pudding mix was available in DPSC's subsistence catalog. Due to limited dairy product availability during wartime, all items requiring milk must be prepared using non-fat dry milk packaged in a can. Since no commercial brand of instant pudding mix met these requirements, none could be substituted or provided by private sector distributors. DPSC realized the problems these types of situations could cause, and were busy converting military specifications to commercial measurements. While this conversion process remained slow, more commercial food items entered the military food delivery system as a result.

Government-Unique Contract Requirements

The government's contracting process was very complex and time-intensive. Because of regulatory requirements or military specifications, certain procedures used in the government contracting process could be unfamiliar to private sector businesses. The time and effort needed to meet these, and other, requirements prevented some capable private sector businesses from competing for government contracts. An illustration showing the steps of the government bid process can be seen in Table 3.

Table 3

Government Bid Process

Step 1:	After receiving all bids, the Contracting Officer eliminates those bids which are the least detailed.
Step 2:	All remaining bids go to a government evaluation panel.
Step 3:	Evaluation panel rates each bid using a point system.
Step 4:	Members of the panel justify the points given to each bid, and compare scores to see if there are any large deviations.
Step 5:	All of the information from above is given to the Contracting Officer, who determines a competitive price range for the bids. Bids that exceed the competitive price range are eliminated, and any remaining bids are scheduled for a site inspection.
Step 6:	The Contracting Officer then totals the points of all remaining bids and awards the contract to the bidder with the highest point total. In case of a tie, the contract is awarded to the bidder with the lowest cost.

Note. Adapted from Frommer, 1992.

In an attempt to make the process less complex, government contracting procedures contained in the Federal Acquisition Regulation (FAR) were revised to stimulate more competition for government contracts. Examples of revisions included the use of oral proposals and draft bid solicitations (Peters, 1996). Regardless of any other changes to the government contracting process, anything that could possibly encroach on small business' piece of government contracts would not be allowed. This was one of the main requirements that any potential government contractor must meet.

To ensure a fair shot at government contracts, a certain percentage of all government contracts were awarded to small businesses. Also, any government

contract valued at more than $500,000 must show that small business subcontractors were utilized in the term of the contract. Officials felt that prior planning by DOD to account for these requirements would be enough to make sure the government contracting process went smoothly without negatively impacting small businesses (DOD Food Inventory, 1993).

Since law stated that 60 percent of essential work be performed by government employees, no more than 40 percent of any essential activity could be performed by non-government employees. Because of this, DOD tried to get a legislative exemption passed that would allow more essential government activities to be performed by private sector contractors. If this exemption passes, DOD officials predicted that 56 percent of Army operations, 51 percent of Navy operations, and only 46 percent of Air Force operations would be completed by government employees (Peters, 1996).

Deliveries to Ships and Certain Other End-Users

Certain DOD officials were reluctant to promote the use of private sector food distributors due to special delivery problems, specifically delivery to United States Navy (USN) ships. The three main concerns raised by USN officials were: (a) would vendors provide adequate quantities of food to deploying ships, (b) who would incur additional costs if private sector distributors were late unloading to ships, and (c) would private sector distributor personnel require security clearances and military escorts? Similar questions were raised by United States Army officials concerning feasibility of deliveries to small boat operators. Under the DPSC depot/DSO food delivery system,

none of these issues were of any concern because all personnel in the depot/DSO system were government employees.

In response to these concerns, private sector distributors stated that whether or not their personnel would deliver directly to certain end-users would be up to the military. If security and accessibility concerns could not be easily rectified, distributors would deliver food items to the base warehouse. Distributors even went so far as to state that they would be able to make deliveries to multiple end-users, and base warehouses, on the same military installation, as long as it was properly coordinated.

Delivery to USN ships ended up being less of a problem than expected. Distributors felt that delivery to ships would not pose any problem as long as deliveries were coordinated with ship personnel and security clearances were obtained prior to delivery. An example of this exact situation occurred at a USN installation in Norfolk, Virginia during Desert Storm. Distributors delivered food items directly to USN ships without experiencing any problems whatsoever (DOD Food Inventory, 1993).

Administrative Work Load

Another major concern was the possibility that use of private sector food distributors would increase the amount of administrative activities needed to support the new system. Fear that ordering and billing problems would tax existing resources were brought up by many DOD officials. DPSC stated that no such problems were being experienced at the military installations currently using private sector food distributors for highly perishable food items. DPSC also felt that once DOD computer systems

were able to electronically interface with private sector food distributors' computer systems, administrative work load would actually decrease.

Food Prices

Keeping food prices the same, if not lower, than those seen in the DPSC food delivery system was very important to those DOD officials who were against using private sector food distributors. As stated earlier, many of the costs associated with the DPSC food delivery system were probably greatly understated, thereby giving an unreliable baseline to be used for private sector food distribution cost comparison. Although prices for some food items increased because of the change to private sector food distributors, distributors needed to keep prices as low as possible if they were to be competitive for government contracts. Because of some minimal price increases, high cost-of-living areas needed to have their basic daily food allowance (BDFA) adjusted to reflect these minor price fluctuations (DOD Food Inventory, 1993).

Supplying Food on Short Notice

The final concern raised was short notice availability of food items from private sector food distributors. Under the DPSC food delivery system, military dining facilities had unlimited access to base warehouse inventory in case of emergency. Distributors stated that short notice deliveries were not a problem, and that in many cases, food could be delivered in just a few hours if absolutely necessary.

The Current Situation With Prime Vendor

On November 30, 1993, a few months after GAO's report was released, Public Law 103-160 passed into law. Public Law 103-160, Subtitle D, Section 341, ordered the Secretary of Defense to establish a task force to look into the overall performance and management of all DOD depots (Public Law 103-160, 1993). A full report on depot maintenance was not submitted to Congress until early 1996. In this report, Defense Depot Maintenance: DOD's Policy Report Leaves Future Role of Depot System Uncertain, GAO investigators recommended that private sector contractors be used in all DOD depots, not just the ones dealing with food items (Defense Depot Maintenance, 1996).

In 1994, a Joint Task Group was formed that implemented the DOD Food Inventory Demonstration (FID) Project. This project became a pilot program for the military food delivery system's use of private sector food service distributors. One dining facility from each branch of military in the Tidewater, Virginia area was chosen to participate in the FID Project. Because of the huge success experienced early on at these installations, the one-year trial period was waived, and the FID Project was expanded (Prime Vendor Guide Book, 1996).

Within the year, FID Project contracts were being used at military installations in Georgia, South Carolina, Alabama and Florida. The installations in these states experienced similar successes to the ones in Virginia, and the FID Project became known as Prime Vendor (Prime Vendor Guide Book, 1996). Prime Vendor was

implemented across the country, and met DOD expectations to drastically reduce DOD depot operations by the year 2000 (DOD Food Inventory, 1993).

In a prepared statement read in mid-April 1996, Deputy Secretary of Defense, Dr. John P. White, spoke of the benefits of contracting business to private distributors. Dr. White said that passage of the Federal Acquisition Streamlining Act of 1994, Federal Acquisition Reform Act of 1996, and DOD Directives 5000.1/5000.2 have allowed an increase in private contracting business (Federal News Service, 1996). Increased contracting with private companies was expected to allow DOD to focus more on their core activities, improve service quality, reduce costs, increase use of new technologies, and operate more efficiently. Dr. White also stated that private contractors would not be used if: (a) use of a private contractor could possibly compromise national security, (b) the private contractor existed in a non-competitive business environment (monopoly), or (c) selecting the private contractor would not result in the best value for the United States taxpayers (Federal News Service, 1996). Prime Vendor appeared to be meeting the requirements outlined by Dr. White. DPSC was recently awarded the Innovations in American Government award, sponsored by the Ford Foundation and Harvard University. This award was given to DPSC for being a "leader in terms of the efficiencies that can be gained from outsourcing" (Peters, 1996, 103).

As stated earlier, one of the purposes of this study was to validate the USAF's decision to implement the Prime Vendor program at military installations in the continental United States. To validate this decision, quantitative and qualitative

statistical analyses were used. This completed study served as the first research/analysis of the Prime Vendor program and its effect on customer satisfaction at Nellis AFB. At the time of its publication, it was also the first such study completed in the USAF.

CHAPTER 3

RESEARCH METHODOLOGY

To determine if an increase in customer satisfaction resulted from a change in food delivery system operations, the military dining facilities at Nellis AFB in Las Vegas, Nevada were used as the sample base. Customers at these military dining facilities consisted of both enlisted and officer military personnel. In these military dining facilities, customer comment forms were given to every tenth customer at each meal period (breakfast, lunch, dinner, and midnight). Customer comment forms were also located throughout the dining facilities, and available to anyone who wanted one. This process resulted in the use of a convenience sample for this study (Cooper & Emory, 1995). An example of the customer comment form used at all Nellis AFB military dining facilities can be seen in Figure 4. Due to the relatively small number of customer comment forms collected during the time period selected for analysis, all customer comment forms, except for those from August 1996, were collected and analyzed.

Data Collection Process

The first step involved contacting the FSO on Nellis AFB. The FSO was part of the Services Squadron, and acted as liaison between the researcher and the Services

FOOD SERVICE CUSTOMER SURVEY	FORM APPROVED OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering andmaintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to the Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project, (0704-0188), Washington DC 20503. Please DO NOT RETURN your form to either of these addresses. Please give your completed form to the cashier or drop it in the customer comment box.

Our goal is to provide our customers with quality food, prompt courteous service, and a pleasant dining environment. You can help us accomplish this goal by answering the following questions.

SECTION I - SURVEY INFORMATION *(Place an "X" in the rating of your choice.)*

1. SURVEY ITEM	EXCELLENT	SATISFACTORY	UNSATISFACTORY	3. DATE	4. TIME
FOOD VARIETY					
FOOD TASTE				5. FACILITY	
TEMPERATURE OF FOOD					
EMPLOYEE APPEARANCE					
CLEANLINESS				6. TYPE SERVICE (Check One)	
COURTESY OF SERVERS				SHORT ORDER / MAIN LINE / OTHER	
OVERALL DINING EXPERIENCE					

7. COMMENTS AND SUGGESTIONS (Please be specific. Use reverse of form if additional space is necessary.)

SECTION II - COMPLETE THIS SECTION IF CUSTOMER DESIRES A RESPONSE

8. NAME OF CUSTOMER (Last, First, Middle Initial)	9. GRADE	10. UNIT OR ORGANIZATION	11. DUTY PHONE

AF FORM 27, JAN 91 *PREVIOUS EDITION IS OBSOLETE.*

Figure 4. Example of Customer Comment Form Used at Nellis AFB Military Dining Facilities

Squadron. After explaining the purpose of the study to the FSO in November 1996, access to customer comment forms from November 1995 through November 1996 was granted to the researcher. These customer comment forms were then released to the researcher and tabulated/coded at home. Since this study concentrated on the change in customer satisfaction that resulted from a change in food delivery system operations, only ratings from the food variety, food taste and temperature of food categories were tabulated and coded. The researcher felt that including ratings from the other categories (employee appearance, cleanliness, courtesy of servers, and overall dining experience) were not pertinent to this study and may have distorted results.

A worksheet was then created to facilitate the tabulation and coding process. An example of this worksheet can be found in Appendices A and B. Ratings for the food variety, food taste and temperature of food categories were coded using the following system: all "Excellent" ratings were coded as "1"; all "Satisfactory" ratings were coded as "2"; and all "Unsatisfactory" ratings were coded as "3". If a rating was not given for a category, it was left blank. This was done to ensure nonexistent ratings would not be processed during statistical analysis. Ratings for the other three variables were recorded in the same way, with the following exceptions: food variety were recorded in the Food Variety column of the worksheet; ratings for food taste were recorded in the Food Taste column of the worksheet; and ratings for food temperature were placed in the Temperature of Food column of the worksheet.

Military grade of each customer was coded also. If the customer was enlisted, the numeric value corresponding to their military grade was used as the coded variable. The

same procedure was used for customers who were officers. For example, if the military grade of a customer was E-1 (Airman Basic), a value of "1" was placed in the Enlisted column of the worksheet, and the corresponding cell in the Officer column of the worksheet was left blank. If the military grade of a customer was O-1 (Second Lieutenant), a value of "1" was placed in the Officer column of the worksheet, and the corresponding cell in the Enlisted column of the worksheet was left blank. If the military grade of the customer was not given on the customer comment form, cells in the Enlisted and Officer columns of the worksheet were left blank.

Meal period times at all Nellis AFB military dining facilities were consolidated into four general meal periods. These four meal periods reflected the most common times of day meals were served in each of the military dining facilities at Nellis AFB. The times for each of these meal periods are shown in Table 4. For this study Breakfast was coded as "1", Lunch was coded as "2", Dinner was coded as "3", and Midnight was coded as "4". When the meal time was included on the customer comment form, the appropriate code number was entered into the Meal column of the worksheet. If the meal time was not included on the customer comment form, the value was left blank. To conclude the tabulation and coding process, any written comments contained on the customer comment form were recorded in the Comments column of the worksheet. If no written comments were contained on the customer comment form, the Comments column of the worksheet was left blank.

Table 4

Nellis AFB Military Dining Facilities Meal Periods

Meal	Serving Hours
Breakfast	0530-0800
Lunch	1030-1230
Dinner	1600-1800
Midnight	2230-0000

After all information had been coded and recorded on worksheets, worksheets were separated and labeled according to their corresponding month, and customer comment forms from November 1995 through November 1996 were then returned to the FSO at Nellis AFB. At the beginning of March 1997, the researcher met with the FSO to obtain the customer comment forms from December 1996 through February 1997. Information from these customer comment forms was then recorded using the process described above.

Once all data from the customer comment forms had been recorded on the appropriate worksheets, this coded information was entered into a single database in the Statistical Product and Service Solutions Program (SPSS), Version 6.1.3 (J. Casner, personal communication, March 12, 1997). In addition to entering all information from the appropriate worksheets, another variable (BEFAFTER) was added to the database to signify whether the comment form came before Prime Vendor or after Prime Vendor. All comment forms from before Prime Vendor were coded as "1", and all comment forms that came after Prime Vendor were coded as "2".

Within this SPSS database, definitions of variables were: FOODTAST = food taste ratings from customer comment forms; FOODTEMP = temperature of food ratings from customer comment forms; FOODVAR = food variety ratings from customer comment forms; ENLISTED = grade of enlisted personnel from customer comment forms; OFFICER = grade of officer personnel from customer comment forms; MEAL = meal period from customer comment form; and BEFAFTER = whether information came before or after the Prime Vendor change.

Statistical Analysis of Data

Since the information from the ratings on survey items is ordinal data, only certain types of analyses could be performed. The first analysis conducted on the database was a frequency analysis. This analysis produced two important pieces of information: (a) the frequency of each response value per variable, and (b) the percentage each response value accounted for the total number of responses per variable. The frequency analysis was completed for all seven variables.

The second analysis run on the database was a cross tabulation analysis with total percentages displayed. For this analysis, the BEFAFTER variable was paired with the FOODVAR, FOODTAST and FOODTEMP variables, for a total of three cross tabulation tables. Each cross tabulation table showed the association between BEFAFTER and the other variable it was paired with. These pairings were chosen to show the difference between customer comments and ratings made before the Prime Vendor change with

those made after the Prime Vendor change. Computing the cross tabulation tables with total percentages displayed made comparative analysis easier for the researcher.

The final analysis conducted on the database was a chi-square (X^2) test. The X^2 test, a popular nonparametric test of statistical significance, was chosen for use by the researcher due to its wide use and ability to show significance in two or more categories (Cooper & Emory, 1995). For this test, the null hypothesis (HØ) was that customer satisfaction levels at the Nellis AFB dining facilities would remain the same after a private sector food service distributor commenced operations; while the alternate hypothesis (HA) was that customer satisfaction levels at the Nellis AFB dining facilities would change after a private sector food service distributor commenced operations. The significance level for this test will be .05. The .05 significance level was chosen due to its frequency of use in research reports and the fact that probability of a statistically significant relationship occurring due to sampling error alone would only be 5% (Babbie, 1990).

Acceptance of the null hypothesis (HØ) would mean that the expected score in each close-ended question was equal to the observed score, and no change in customer satisfaction resulted from the change in food delivery system. Rejection of the null hypothesis (HØ) would mean that the observed score for each close-ended question was not equal to the expected score, meaning a change in customer satisfaction resulted from the change in food delivery system.

Content Analysis of Written Comments

Written remarks offered in the Comments and Suggestions area were also analyzed. Even though analysis of this information was time-consuming (952 comment forms were read), the results would be quite valuable. Content analysis of written remarks submitted both before and after the change in food delivery system would be done to see if any changes in customer attitude were detected by the type of written comments made.

In order to do this, a hybrid between the contextual approach and a priori approach to content analysis was used. The contextual approach to content analysis allowed the researcher to take actual comments made by customers and separate them into different coded categories (Weisberg & Bowen, 1977). The researcher felt that comments concerning the change in food delivery system would center around food taste, food quality, food texture, and food availability. These expectations prior to actual comment card evaluation met the criteria for the a priori approach to content analysis (Weisberg & Bowen, 1977). Combining the results of the contextual and a priori approaches resulted in food temperature, food taste, food variety, food availability and general comments used as the categories for content analysis in this study. Comments made about areas not affected by a change in food delivery system (i.e. employee appearance and courtesy, etc.) were not recorded by the researcher.

Each comment was placed into either the food temperature, food taste, food variety, food availability or general comments category by the researcher. Comments placed in the "General Comments" category described either a positive or negative

attitude toward the food, but nothing specific enough for the comment to be placed into one of the other four categories. Examples of these comments include: super meal, outstanding breakfast, good food, excellent, dry cake, bad salad bar, too many onions, and soggy fries.

Once all written comments had been recorded, two cross tabulation analyses were conducted. The first cross tabulation compared the total number of positive/negative written comments received before the Prime Vendor change with the total number of positive/negative written comments received after the Prime Vendor change. The second cross tabulation compared the number of positive/negative written comments concerning food variety, food taste, and food temperature before the Prime Vendor change with the number of positive/negative written comments concerning food variety, food taste, and food temperature after the Prime Vendor change. These comparisons were chosen to show the difference between written comments made before the Prime Vendor change with those made after the Prime Vendor change.

CHAPTER 4

RESULTS AND FINDINGS

This chapter presents results and findings of the analyses conducted for this study. A total of 952 comment forms were analyzed for this study. Appendix A shows the information from the 505 comment forms collected before the Prime Vendor change. Appendix B shows the information from the 447 comment forms collected after the Prime Vendor change.

Results of Frequency Analysis

The first analysis conducted on the database was a frequency analysis. This analysis gave frequencies for each value within the variable, as well as percentage of the total each value accounted for in the variable. Frequency analysis for the FOODVAR variable can be observed in Table 5. Table 5 shows that "Excellent" ratings accounted for 53 percent of all ratings made on food variety, while "Satisfactory" ratings accounted for more than 40 percent of the ratings made on food variety.

Frequency analysis for the FOODTAST variable may be viewed in Table 6. Table 6 reveals that "Excellent" ratings accounted for nearly 61 percent of all ratings

Table 5

Frequency Analysis on FOODVAR

Value	Frequency	Percent	Valid Percent
1	510	53.6	53.7
2	387	40.7	40.8
3	52	5.5	5.5
Missing	3	.3	Missing
Total	952	100.0	100.0

Table 6

Frequency Analysis on FOODTAST

Value	Frequency	Percent	Valid Percent
1	578	60.7	60.7
2	338	35.5	35.5
3	36	3.8	3.8
Total	952	100.0	100.0

made on food taste, while "Unsatisfactory" ratings accounted for less than 4 percent of the ratings made on food taste.

Frequency analysis for the FOODTEMP variable can be viewed in Table 7. Table 7 illustrates that "Excellent" ratings accounted for more than 54 percent of all ratings made on food temperature, while "Satisfactory" ratings accounted for almost 39 percent of the ratings made on food temperature.

Table 7

Frequency Analysis on FOODTEMP

Value	Frequency	Percent	Valid Percent
1	519	54.5	55.3
2	368	38.7	39.2
3	52	5.5	5.5
Missing	13	1.4	Missing
Total	952	100.0	100.0

Frequency analysis for the ENLISTED variable can be seen in Table 8. A closer look at Table 8 reveals that not all enlisted grades turned in the same number of customer comment forms. The four enlisted grades that turned in the most comment forms were E-5 (Staff Sergeant), E-3 (Airman First Class), E-4 (Senior Airman), and E-7 (Master Sergeant). Since almost 40 percent of all comment forms could not be categorized as "Enlisted", valid percentages were used to obtain the above ranking.

Frequency analysis for the OFFICER variable may be observed in Table 9. Table 9 indicates that O-5's (Lieutenant Colonel) turned in more than 50 percent of all comment forms from officer personnel. Almost 84 percent of all comment forms could not be categorized as "Officer", leaving only 16 percent of the total able to be categorized as "Officer".

Frequency analysis for the MEAL variable can be viewed in Table 10. Table 10 shows that almost 70 percent of all comment forms came from the lunch meal period. In contrast, a little less than 6 percent of all comment forms came from the midnight meal period. According to the Nellis AFB FSO, the lunch meal accounts for just under

Table 8

Frequency Analysis on ENLISTED

Value	Frequency	Percent	Valid Percent
1	3	.3	.5
2	64	6.7	11.2
3	96	10.1	16.8
4	91	9.6	15.9
5	119	12.5	20.8
6	61	6.4	10.6
7	89	9.3	15.5
8	18	1.9	3.1
9	32	3.4	5.6
Missing	379	39.8	Missing
Total	952	100.0	100.0

Table 9

Frequency Analysis on OFFICER

Value	Frequency	Percent	Valid Percent
1	12	1.3	7.8
2	6	.6	3.9
3	14	1.5	9.2
4	14	1.5	9.2
5	77	8.1	50.3
6	28	2.9	18.3
8	2	.2	1.3
Missing	799	83.9	Missing
Total	952	100.0	100.0

50 percent of all meals served, breakfast and dinner meals account for just under 25 percent of all meals served, and the midnight meal accounts for under 5 percent of all meals served (T. Alcott, personal communication, April 10, 1997).

Table 10

Frequency Analysis on MEAL

Value	Frequency	Percent	Valid Percent
1	107	11.2	11.5
2	651	68.4	69.8
3	121	12.7	13.0
4	54	5.7	5.8
Missing	19	2.0	Missing
Total	952	100.0	100.0

Frequency analysis for the BEFAFTER variable can be observed in Table 11. Table 11 indicates that 53 percent of the comment forms came before the Prime Vendor change, while 47 percent came after the Prime Vendor change.

Table 11

Frequency Analysis on BEFAFTER

Value	Frequency	Percent	Valid Percent
1	505	53.0	53.0
2	447	47.0	47.0
Total	952	100.0	100.0

Results of Cross Tabulation Analysis

The next analysis conducted on the database was a cross tabulation analysis with total percentages displayed. Three cross tabulation analyses were run: BEFAFTER by FOODVAR; BEFAFTER by FOODTAST; and BEFAFTER by FOODTEMP. Table 12 shows results of the BEFAFTER by FOODVAR cross tabulation analysis. "Excellent" ratings on FOODVAR increased more than 12 percent after the Prime Vendor change, while "Unsatisfactory" ratings decreased more than 4 percent during the same time period. "Excellent" ratings accounted for almost 54 percent of all ratings made on food variety, while "Unsatisfactory" ratings only accounted for 5.5 percent of all ratings made on food variety.

Table 12

Cross Tabulation Analysis: BEFAFTER by FOODVAR

	Count Row Percent	FOODVAR 1.00	 2.00	 3.00	Row Total
BEFAFTER	1.00	241 48.0	223 44.4	38 7.6	502 52.9
	2.00	269 60.2	164 36.7	14 3.1	447 47.1
	Column Total	510 53.7	387 40.8	52 5.5	949 100.0

Table 13 shows results of the BEFAFTER by FOODTAST cross tabulation analysis. "Excellent" ratings on FOODTAST increased 10 percent after the Prime Vendor change, while "Unsatisfactory" ratings decreased a little more than 3 percent. "Excellent" ratings accounted for more than 60 percent of all ratings made on food taste, while "Unsatisfactory" ratings accounted for roughly 4 percent of all ratings made on food taste.

Table 13

Cross Tabulation Analysis: BEFAFTER by FOODTAST

	Count Row Percent	FOODTAST 1.00	 2.00	 3.00	Row Total
BEFAFTER	1.00	283 56.0	195 38.6	27 5.3	505 53.0
	2.00	295 66.0	143 32.0	9 2.0	447 47.0
	Column Total	578 60.7	338 35.5	36 3.8	952 100.0

Table 14 shows results of the BEFAFTER by FOODTEMP cross tabulation analysis. "Excellent" ratings on FOODTEMP increased a little more than 12 percent after the Prime Vendor change, while "Unsatisfactory" ratings decreased more than 4

percent. Results of "Excellent" and "Unsatisfactory" ratings as a percentage of the whole were similar to the ones seen for FOODVAR. "Excellent" ratings accounted for just over 55 percent of all ratings made on food temperature, while "Unsatisfactory" ratings accounted for 5.5 percent of all ratings made on food temperature.

Table 14

Cross Tabulation Analysis: BEFAFTER by FOODTEMP

	Count Row Percent	FOODTEMP 1.00	 2.00	 3.00	Row Total
	1.00	247 49.6	213 42.8	38 7.6	498 53.0
BEFAFTER	2.00	272 61.7	155 35.1	14 3.2	441 47.0
	Column Total	519 55.3	368 39.2	52 5.5	939 100.0

Results of Chi-Square (X^2) Test

The final analysis conducted on the database was a chi-square (X^2) test. Results of the X^2 test are shown in Table 15. Table 15 presents Pearson X^2 values for each of the cross tabulation analyses detailed above. The Pearson X^2 significance for the BEFAFTER by FOODTAST cross tabulation was .001, while the Pearson X^2

significance for the BEFAFTER by FOODVAR and BEFAFTER by FOODTEMP cross tabulations were both .0001.

Table 15

Pearson Chi-Square (X^2) Test Results

Cross Tabulation	Pearson X^2 Value	Degrees of Freedom	Significance
BEFAFTER by FOODVAR	18.48353	2	.0001
BEFAFTER by FOODTAST	13.76662	2	.00102
BEFAFTER by FOODTEMP	18.02884	2	.00012

Results of Content Analysis

Content analysis of written comments was also conducted. Table 16 illustrates the breakdown of comments received on comment forms before the Prime Vendor change. Of particular note were the number of negative comments on food temperature (25) and food availability (69), and the lack of any positive comments in these same areas. Analysis of the general comments category showed that 131 positive comments and 44 negative comments were made before the Prime Vendor change.

Table 17 reveals the breakdown of comments received on comment forms after the Prime Vendor change. While the number of negative comments on the food temperature (17) and food availability (16) categories decreased, positive comments still hovered around zero (0). The number of positive comments in the general comments

Table 16

Content Analysis on Written Comments Before the Prime Vendor Change

Category	Positive Comments	Negative Comments
Food Variety	2	16
Food Taste	11	17
Food Temperature	0	25
Food Availability	0	69
General Comments	131	44
Total	144	171

category remained about the same (137), but negative comments in the general comments category dropped to only 10.

Table 17

Content Analysis on Written Comments After the Prime Vendor Change

Category	Positive Comments	Negative Comments
Food Variety	3	13
Food Taste	13	14
Food Temperature	1	17
Food Availability	0	16
General Comments	137	10
Total	154	70

Table 18 shows the results of the cross tabulation analysis between total written comments by Prime Vendor change. Overall positive comments increased more than

23 percent after the Prime Vendor change, while overall negative comments decreased by the same percentage after the Prime Vendor change.

Table 18

Cross Tabulation Analysis: Total Written Comments by Prime Vendor Change

	Count Row Percent	Written Positive	Comments Negative	Row Total
Prime Vendor	Before	144 45.7	171 54.3	315 58.4
Change	After	154 68.75	70 31.25	224 41.6
	Column Total	298 55.3	241 44.7	539 100.0

Table 19 shows the results of the cross tabulation analysis between written comments concerning food variety, food taste, and food temperature by Prime Vendor change. Overall positive comments increased only 9.5 percent after the Prime Vendor change, while overall negative comments decreased by the same percentage after the Prime Vendor change.

Table 19

Cross Tabulation Analysis: Food Variable Written Comments by Prime Vendor Change

	Count Row Percent	Written Comments Positive	 Negative	Row Total
Prime Vendor Change	Before	13 18.3	58 81.7	71 53.8
	After	17 27.9	44 72.1	61 46.2
	Column Total	30 22.7	102 77.3	132 100.0

The results and findings from this chapter were analyzed by the researcher over a period of several weeks. The results of this analysis were detailed in the following chapter of this study. Conclusions made from these results were also included, as well as any recommendations for further action or study.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

This chapter presents conclusions and recommendations from the different types of analyses conducted on the information gathered from the customer comment forms of Nellis AFB dining facilities from November 1995 to February 1997. Conclusions were drawn from both the statistical and content analyses conducted in Chapter 4 of this study. Due to the data collection method at Nellis AFB military dining facilities, conclusions drawn from the results of this study are applicable only to the customer population at Nellis AFB that turn in comment forms. Conclusions are not applicable to the general population of Nellis AFB or the general population of the USAF. This chapter concludes with recommendations for future action by Nellis AFB and USAF personnel.

Conclusions

Frequency analysis of the FOODVAR, FOODTAST, and FOODTEMP variables showed that more than 90 percent of ratings in these areas were "Satisfactory" or better. FOODVAR and FOODTEMP had 94.5 percent "Satisfactory" or better ratings, while FOODTAST had 96.2 percent "Satisfactory" or better ratings. This

result was important because it showed that more than 94 percent of customers were at least satisfied with their dining experience at Nellis AFB military dining facilities. Since the Air Combat Command (ACC) goal for customer satisfaction is to have at least 90 percent "Satisfactory" or better ratings on foodservice customer comment forms, Nellis AFB military dining facilities have met this goal (T. Alcott, personal communication, November 15, 1996).

After closer analysis of the comment form used to gather customer feedback, the researcher concluded that the comment form itself is biased. "Satisfactory" and "Excellent" are two of the three ratings available for survey items. This indicated that almost 67 percent of the choices for ratings were "Satisfactory" or better. The researcher felt that if the comment form were unbiased, the 90 percent "Satisfactory" or better results witnessed in the frequency analysis may not have occurred.

Frequency analysis on ENLISTED and OFFICER yielded some interesting results as well. The customer segment targeted by Nellis AFB military dining facilities is made up mostly of single, enlisted personnel new to the military. The people within this customer segment are referred to as Subsistence-in-kind (SIK) customers. By definition, no officer can be an SIK customer. At Nellis AFB, a total of 1,072 people are defined as SIK customers. Of these 1,072 SIK customers, 1069 (99.7 percent) have a rank of Staff Sergeant (E-5) or below.

A total of 726 comment forms were received that could be classified as either ENLISTED or OFFICER. Of these 726 comments, 373 (51.4 percent) were turned in by customers whose rank was Staff Sergeant (E-5) or below. This shows that the ranks

comprising 99.7 percent of the target customer segment account for only 51 percent of all customer comment forms that could be classified as either ENLISTED or OFFICER. It is possible that some of the customers with rank of Staff Sergeant (E-5) or below who turned in a comment form were not SIK customers. This causes the 51 percent number to decrease even further.

These results also indicate that a large percentage (48.6 percent) of comment forms received are from customers outside of the target customer segment. This information should be of interest to the Nellis AFB FSO in terms of which customers are turning in comment forms.

Cross tabulation analysis provided the bulk of conclusions from this study. The cross tabulation of BEFAFTER by FOODVAR showed that "Excellent" ratings on food variety accounted for 48 percent of the comments made before the Prime Vendor change. This percentage increased to 60.2 percent after the Prime Vendor change. "Satisfactory" ratings on food variety decreased from 44.4 percent before the Prime Vendor change to 36.7 percent after the Prime Vendor change, while "Unsatisfactory" ratings on food variety decreased from 7.6 percent before the Prime Vendor change to 3.1 percent after the Prime Vendor change. These figures clearly indicated that customer satisfaction concerning food variety increased as a result of the Prime Vendor food delivery system.

Similar findings were seen through the BEFAFTER by FOODTAST and BEFAFTER by FOODTEMP cross tabulations. "Excellent" ratings on food taste increased from 56 percent before the Prime Vendor change to 66 percent after the

Prime Vendor change. "Excellent" ratings on food temperature increased from 49.6 percent before the Prime Vendor change to 61.7 percent after the Prime Vendor change. Decreases in the number of "Satisfactory" and "Unsatisfactory" ratings were also seen in these two areas as a result of the Prime Vendor change. These results also indicated that the Prime Vendor food delivery system was responsible for an increase in customer satisfaction concerning the areas of food taste and food temperature.

The results of the X^2 test supported the results of the cross tabulation analysis. The Pearson X^2 value of .0001 for FOODVAR indicated that the probability of a relationship similar to the one seen between BEFAFTER and FOODVAR occurring strictly by chance was 1 in 10,000. A similar conclusion was drawn from the Pearson X^2 value of .00012 for FOODTEMP. The Pearson X^2 value of .00102 for FOODTAST indicated that the probability of a relationship similar to the one seen between BEFAFTER and FOODTAST occurring strictly by chance was 1 in 1,000.

These findings demonstrate that there were significant relationships between the variable pairings BEFAFTER by FOODVAR, BEFAFTER by FOODTAST, and BEFAFTER by FOODTEMP. Because of these relationships, and results of the cross tabulation analyses, the null hypothesis (H0) that customer satisfaction levels at the Nellis AFB dining facilities would remain the same after a private sector food service distributor commenced operations was rejected. Results of the cross tabulation analyses and X^2 tests clearly indicated that customer satisfaction levels did not remain the same after a private sector food distributor commenced operations.

Content analysis of the written comments yielded somewhat different results than the statistical analyses. The number of positive written comments made before the Prime Vendor changed only slightly compared to the number of positive written comments made after the Prime Vendor change. A total of 144 positive comments were made before the Prime Vendor change, while a total of 154 positive comments were made after the Prime Vendor change. This indicated that the Prime Vendor change did not cause an increase in the number of positive comments, and therefore did not change customer attitude regarding the satisfaction experienced at Nellis AFB military dining facilities.

The number of negative written comments made before the Prime Vendor change were considerably different than the number of negative written comments made after the Prime Vendor change. A total of 171 negative written comments were made before the Prime Vendor change. Of these 171 negative written comments, 69 comments (40 percent) concerned food availability and 44 comments (25.7 percent) concerned general dissatisfaction with the food. This contrasts with only 70 negative written comments made after the Prime Vendor Change. Of these 70 negative written comments, only 16 comments (22.8 percent) concerned food availability and 10 comments (14.3 percent) concerned general dissatisfaction with the food.

This not only indicated a drop in the number of negative comments made in these areas (from 69 to 16 for food availability and from 44 to 10 for general dissatisfaction), a drop in the percentage of the total these comments accounted for also occurred (from 40 percent to 22.8 percent for food availability and from 25.7 percent to

14.3 percent for general dissatisfaction). One conclusion drawn from these results was that although a change in customer satisfaction could not be observed through content analysis of written comments, a decrease in customer dissatisfaction was observed through content analysis of written comments. Another conclusion drawn from these results was that the change to Prime Vendor increased the availability of food items at Nellis AFB military dining facilities.

Results of the cross tabulation analyses on the written comments yielded somewhat similar results. Overall positive written comments increased by 23 percent after the Prime Vendor change. This indicated to the researcher that the Prime Vendor change may have accounted for an increase in the number of overall positive written comments made by customers. However, positive comments concerning food variety, food taste, and food temperature increased only a little more than 9 percent after the Prime Vendor change. This indicated to the researcher that the Prime Vendor change did not account for an increase in the number of written comments made by customers concerning food variety, food taste, and food temperature.

The results found through both statistical and content analysis suggest to the researcher that the decision to implement Prime Vendor in USAF military dining facilities was well advised.

Recommendations

Since this study concentrated on the effects of Prime Vendor on customer satisfaction at the USAF military dining facilities at Nellis AFB, the scope of this study

is specific only to customers at Nellis AFB who turn in comment forms. Changes seen in customer satisfaction at Nellis AFB military dining facilities after only six months of Prime Vendor operation validated the change in food delivery systems. USAF officials should consider implementing Prime Vendor at all USAF military dining facilities in the United States, if they have not done so already. Implementation of Prime Vendor would allow the USAF to increase the quality-of-life of their military personnel.

The researcher recommends that USAF officials conduct a random sample survey of SIK customers at installations where Prime Vendor has been implemented. This type of survey study would be able to determine customer attitudes toward the Prime Vendor change better than this study. The survey should concentrate only on areas that the Prime Vendor change affected (food variety, food quality, food taste, food availability, etc.).

The researcher also recommends that USAF officials consider revising the comment forms used to gather information regarding military dining facilities. First, Food Availability should be added to the survey items currently used (Food Variety, Food Taste, etc.) to gather information on military dining facility operations. The researcher found 95 comments (10 percent of the total number of written comments) concerning food availability on the comment forms used for this study. Since comments concerning food availability do not readily fit into any of the existing survey items on the comment form, the addition of Food Availability will increase the effectiveness of the comment form.

Next, the type service (short order, main line, and other) area of the comment form is not necessary and should be deleted. The researcher found that this part of the comment form did not yield any particularly useful information and deletion of it would not jeopardize the overall usefulness of the comment form.

Also, the comment form should have an area where customers could indicate whether they are an SIK customer or not. Addition of this area would allow FSO's to better track comments turned in by their primary customer segment. This area may also provide more insight into which type of customer is turning in anonymous comment forms at military dining facilities.

The rating categories ("Excellent", "Satisfactory", and "Unsatisfactory") used for the survey items should also be revised. The rating categories of "Excellent", "Satisfactory", and "Unsatisfactory" are useful, but they could be more effective in measuring satisfaction levels on survey items. The researcher recommends adoption of a five-point rating scale to make comment form information more useful. This new rating scale would include the rating categories of "Excellent", "Good", "Neutral", "Poor", and "Unsatisfactory".

First, five rating levels are recommended in order to more accurately determine customer's attitudes on survey items. Next, changing the "Satisfactory" rating to "Neutral" provides for an unbiased comment form. A "Neutral" rating creates a balance between the "Excellent"/"Good" side and the "Unsatisfactory"/"Poor" side. With the "Neutral" rating, 50 percent of the rating options cover favorable customer attitudes, and 50 percent of the rating options cover unfavorable customer attitudes.

Late in the research study process, it came to the attention of the researcher that factors other than the Prime Vendor change may have accounted for some of the results found in this study. First, a press release by the USAF on Prime Vendor was covered by ABC's news program "20/20" before its implementation at Nellis AFB (T. Alcott, personal communication, April 14, 1997). This press release may have affected the perceptions of Nellis AFB military dining facility customers regarding the Prime Vendor change. Next, Nellis AFB began a personnel exchange program with the Rio Suite Hotel and Casino in Las Vegas, Nevada in October 1996. This exchange program allows one military chef to learn food preparation at the Rio Suite Hotel and Casino (T. Alcott, personal communication, April 14, 1997). This program may have accounted for changes in food taste and food temperature.

Finally, Nellis AFB military dining facilities underwent inspections for the Henessey Award during September 1996 and February 1997. The Henessey Award is the USAF's award for food service excellence. In preparation for the inspections, operations and methods were closely scrutinized, and publicity concerning the inspection was posted in the military dining facilities (T. Alcott, personal communication, April 14, 1997). These inspections may have accounted for changes in food taste and food temperature as well. The researcher recommends that this study be replicated at a time when the above factors would not be applicable, in order to determine if these factors affected this study's results and conclusions.

After four years of experience in the USAF as a FSO, the researcher indicated in the first chapter of this study that a change in the food delivery system of the USAF

was needed. In September 1996, the USAF did just that by implementing Prime Vendor. Chapter Two showed the history of the USAF food delivery system, from Troop Support to Prime Vendor. Chapter Three outlined the research methodology used by the researcher to conduct this study. Chapter Four described the results and findings of both statistical and content analysis of the data gathered for this study. Finally, Chapter Five listed the conclusions and recommendations of the researcher after interpreting the results of Chapter Four. The researcher would like to see this study be the basis of further research into the effectiveness of the USAF's Prime Vendor food delivery system.

APPENDIX A

Statistics Before Prime Vendor Change
November 1995 - July 1996

Food Variety	Food Taste	Food Temperature	Enlisted	Officer	Meal	Comments
3	3	2	2		3	short order line the best
1	1	1		6	2	
2	1	2		5	2	
2	1	2	5		2	
1	1	1	9		1	outstanding breakfast
2	2	2	5		2	
1	1	2	5		3	
1	1	1	7		2	very tasty sandwich
1	1	1	9		2	great lasagne
3	3	2	2		3	food good, but no taste
1	1	1		3	2	salad spoiled
2	2	1	2		2	good food
2	1	1		6	2	brown lettuce
3	2	2	2		3	good food
1	1	3	7		2	cold, tasty food
2	2	2	4		2	
1	2	3		4	2	all food cold

1	1	1		5	2	super meal
1	1	1		6	2	enjoyable meal
1	1	1		5	2	excellent meal
1	1	1	6		2	fantastic chicken
2	2	2	5		2	steak sandwich burned
1	1		7		2	great ham
2	2	2		6	2	
2	2	2	3		2	stale cookies
2	2	2	4		2	dry desserts, cold fries
1	3	3	5		2	
2	3	2	2		3	
3	1	1	7		2	need more chef salads
3	2	2	8		2	need more chef salads
1	1	3	7		1	
2	2	2	2		3	
1	1	1			1	excellent breakfast
2	2	1		4	2	
1	1	1	5		2	
2	1	1	5		1	excellent eggs and pancakes
1	1	3	7		2	
2	2	3	6		2	cold fish
1	1	1	2		2	
2	2	2	4		2	
1	1	1	4		2	
2	2	2	5		2	
2	2	3	3		1	cold potatoes

2	2	1	3		1	
1	1	1		6	2	
1	1	1	6		3	
1	1	1	6		2	
2	2	2	1		1	
1	1	1	5		2	
2	2	2			2	dry cake
2	2	2	7		2	need ice cream, no tuna either
1	1	1	9		2	no cabbage with corned beef
3	1	1	7		2	no cabbage with corned beef, no sour cream either
2	1	1	6		2	need ice cream
2	3	2	3		2	bad tuna
3	1	1	2		3	same food from lunch
2	2	2			2	need ice cream
1	1	1	5		2	
2	1	1	3		2	good soup, cold lasagne
3	1	1	3		3	need more variety
3	2	3	2		2	only diet soda available
2	3	3	2		2	food undercooked and cold
3	2	2	3		2	
2	1	1	4		2	need sandwich variety
2	2	2	5		2	need variety of chips
1	1	1	7		2	

2	2	1	3		2	good food
1	1	1	5		2	good food except dessert, too much vanilla
1	1	2		5	2	good job
1	1	1			2	excellent idea having grilled onions and mushrooms
1	1	1	9		2	tuna melt and BBQ beef superb
2	1	2			2	cold corn, no ice cream
2	2	3			2	cold corn, no ice cream
1	1	2	9		2	no ice cream
2	2	3	8		2	no ice cream, cashier line too long, food cold by the time I get to the table
1	1	2	9		2	no ice cream, cashier line too long, food cold by the time I get to the table
1	1	2	9		2	corn cold, no ice cream
2	2	2	2		4	need chef salads on weekends
2	2		6		4	need chef salads on weekends
3	2		6		4	need chef salads on weekends
2	1	2	8		2	excellent food
3	2	2			2	serve something besides rice and potatoes
1	2	2			1	best dining hall in Air Force
1	1	1		3	3	

2	2	2	6		2	cashier line too long, food cold by the time I get to the table
2	2	2	3		3	need V-8 again
2	2	2	3		3	need V-8 again
2	1	1	3		2	no ice cream, need hot dogs and hamburgers for dinner
2	2	2	3		3	food unsatisfactory, need hot dogs and hamburgers for dinner
1	1	1	5		3	good food
2	2	2			2	keep ham on short-order line
1	1	1	2		2	
3	1	2	7		2	no chef salad, no healthy choice items
2	1	1			2	no ice cream
2	2	2	7		2	no ice cream
2	2	2	7		2	no ice cream
1	1	2	9		2	no ice cream
2	2	2	9		2	no ice cream
2	2	2	7		2	no ice cream
2	1	2	9		2	no ice cream
3	2	2	6		2	no ice cream
3	2	2	6		2	no ice cream
2	2	2	7		2	no ice cream
2	2	3	7		2	no ice cream, cold noodles
2	1	2	9		2	no ice cream

2	2	2	6		2	no ice cream, small salads
1	1	1			3	delicious turkey
2	1	2			3	delicious turkey
2	3	3	7		2	no ice cream, cold food
2	1	3	6		2	cold soup and fries
2	2	3			2	cold potatoes, bland steak
2	2	2				
2	3	2		5	2	cauliflower tough and tasteless, chicken and broccoli good
1	1	2	5		2	good bacon
	1	1	2			food tastes great
1	1	1	9		2	superb chicken, outstanding broccoli
2	1	2	6			tasty teriyaki steak
2	1	1	4			no fried shrimp left
1	1	1	7		2	catfish, rice and peas were great, excellent taste
2	2	2	2		3	
2	1	2	6		2	no cheesecake or ice cream
1	1	1	5		2	no ham and eggs on salad bar
2	2	2	3		2	good chocolate chip cookies
1	1	2	5		2	best cream of mushroom soup ever

3	2	2	2		2	more healthy foods needed
3	2	1	3		2	bad salad bar, get real dressing and lose dressing packets
2	2	2			2	
1	1	1	9		2	outstanding T-bone
1	1		9		2	best meal in Vegas
1	1	1	4		2	awesome T-bone
1	1	2	6		2	
2	2	3		4	2	
1	1	1	6		2	great food
2	1	1	7		2	no ice cream
1	2	2	4		2	
1	1	1	5		2	good peas, gravy and rice, turkey and fruit plate
1	1	2	4		3	need horseradish with roast/corned beef
2	1	2	5		2	
1	1	1	7		2	no chocolate ice cream
1	1	1	5		2	perfect meat loaf
1	2	3	5		3	cold BBQ chicken and scalloped potatoes
1	1	1			2	good sweet and sour pork, vegetables and fried rice
1	1	1	4		2	tasty food, sweet and sour pork and cream of broccoli soup were good

3	2	3	3		3	undercooked food
2	2	1	3		3	too many vegetables in the main dish
2	2	1			3	
2	2	1			3	
1	1	1	2		3	
1	1	1		5	2	serve non-meat items during Lent
1	1	1		5	2	fish on Fridays during Lent
2	1	1	3		3	
2	1	2	5		3	
1	1	2	4		2	
2	2	2	2		2	
1	1	1		3	2	great food
1	1	1			2	excellent chicken
2	1	1	2		2	chicken enchiladas had bones
2	3	1	4		2	greasy spaghetti, use real pasta sauce
1	2	2		2	2	good turkey, bland mashed potatoes, outstanding cherry pie
2	1	2			2	good Spanish pork steak
2	1	2			1	
1	1	1	3		2	
1	1	1	4		4	
1	1	1	2		3	very good food

2	2	2			3	too many onions in entree
3	2	2			3	need chicken patties, wheat rolls, chicken and mushroom entrees, cheesecake, shrimp and fresh fish, less onions, more steak and artichokes
2	3	3			3	
2	1	2			2	
1	2	1	6		3	more shrimp in jambalaya, too much pepper
2	2	2	3		3	need better radishes, strawberry stem in yogurt
1	1	2			2	
2	1	1	5		2	
3	2	2			2	
2	2	3			2	
2	2	2			2	an ice cream machine would be nice
2	2	3	4		2	
2	2	2			2	
3	2	3			2	need better variety, hamburger undercooked
2	2	2			2	
1	2	1			2	
1	1	1		5	2	
2	2	2			2	

1	1	1			2	
2	2	2	5		2	ice cream would be nice
2	2	2	4		2	ice cream would be nice
2	2	2	4		2	ice cream would be nice
1	1	1			1	
1	1	1	5		2	good meatloaf
1	1	2	7		1	
2	2	2	3		2	need peanut butter in AM
1	1	1		4	1	superb breakfast
2	2	2		5	2	
1	1	1		5	2	wonderful fish
2	2	2	7		2	bad salad bar, need sugar-free desserts
1	1	1	4		2	excellent cheesecake
1	1	1		3	4	good food
2	1	1		2	2	great food
1	1	1	7		2	best meal ever, excellent fried chicken, need sugar-free desserts
1	1	1	5		2	
1	2	2	6		2	vegetables undercooked
2	1	2			2	
1	1	1			2	
1	1	1	7		2	superb desserts
1	1	1			2	excellent catfish
1	1	2			2	
2	2	2		5	2	outstanding

2	2	2			2	
2	2	2			2	
1	2	1	5		2	excellent dining
1	2	1	5		3	consistent quality food
2	1	1	7		3	best dining hall ever
2	2	2			3	
2	1	1		3	2	
1	2	2	4		3	
2	2	2			3	
1	1	1			2	
2	2	2	3		2	baked chicken rocked
1	1	1		5	2	
1	1	1	6		2	
1	1	1	7		2	
1	2	2	7		2	
2	2	2		5	2	great job
1	1	1	7		2	
2	2	1			2	good pasta salad, would be better without so many onions
2	2	2			2	
3	2	2	4		4	need non-fat milk, non-fat yogurt, and fruit
3	2	2	4		3	list nutrition information
3	2	2	2		1	need dill pickles
1	1	1		5	2	excellent seafood gumbo
1	1	1	7		2	excellent creole

2	2	2	4		2	
2	2	2			2	
1	1	1			2	excellent pork steaks
1	1	1		3	2	
1	1	2			2	good pork chops and macaroni and cheese
1	1	1			2	need french fries
1	1	2			3	
2	1	2			2	
2	3	1	6		2	manicotti too sweet
2	2	2	3		2	
1	1	1	9		2	
1	1	1			2	
2	1	2	4		1	manicotti too sweet, alfredo bland, good lasagne and spaghetti
2	2	2	3		2	
2	2	2	4		2	
2	1	2	5		2	
2	2	2	5		2	
2	2	2			2	garlic toast too crispy
1	1	2			2	
1	1	1	3		2	need ice cream
1	1	1	5		1	
1	1	1			3	excellent lasagne
2	2	3	3		3	
1	1	1	9		2	too much pepper in soup

1	1	1			3	good food
1	1	1	5		1	best omelet ever
3	3	2	3		3	pork undercooked
2	2	1			2	
1	1	1	9		2	
1	1	1	7			outstanding chicken, sprouts perfect, gravy bland
1	1	1	2			
1	2	2		2		great food
1	1	2	5		2	
2	2	1	9		2	
2	2	2			2	
2	2	2			2	
2	2	2			2	
1	1	1	4		2	best meal at Nellis AFB
1	1	1	6		2	outstanding steamship round
1	1	1	7		2	excellent food
1	1	1	9		2	excellent manicotti, great soup
1	1	1	7		2	outstanding food
1	1	1			2	
1	1	2	5		2	cheap tortillas
1	1	1			3	best cordon bleu, excellent
1	1	2			2	great lunch

3	2	2	4		3	tatsy salad, need non-meat items
2	2	1	3		2	
2	2	2	4		3	
1	1	1	3		4	excellent omelet and french toast
2	2	2	3		3	
1	2	1	8		2	
1	1	1	3		2	good variety
1	1	2	5		2	
2	2	2			2	great pork steaks
1	1	1	5			excellent entrees
1	1	2	6		2	
2	1	1	4		2	
1	1	1	7		2	
2	1	1	6		2	
2	2	2	8		2	outstanding apple cobbler
1	1	1			2	loved baked chicken
2	1	2			2	
1	1	2	5		2	chicken cold
2	3	1	3		3	need real mashed potatoes
1	3	1	3		3	bad mashed potatoes
1	1	2			2	
2	1	2			2	good meal
1	1	1			1	wonderful
1	1	2	5		3	

1	1	1			2	
1	1	1		5	1	great food
2	1	2	8		1	no biscuits, toast or syrup
1	1	2			2	excellent lasagne and eggplant
2	2	2	4		2	
1	1	1	7		1	delicious food
1	2	1	4		1	
2	2	2	3		1	burnt bacon, cold potatoes
1	1	1	6		1	delicious omelet
1	1	1	5		2	best BBQ chicken ever
2	2	2			3	
2	2	3			4	
2	2	3			2	
2	2	3	7		1	potatoes raw
	3	2			2	crunchy pork
1	1	1			1	
2	2	2	7		2	soup too thick
1	1	1	4		2	great
1	1	1	4		2	excellent oriental meal
1	1	1			1	good food
2	2	3	2		2	heat food more
2	2	2	4		1	
1	1	2	5		2	great food
2	1	1	4		2	
2	2	1		4	2	

2	1	1			2	
	1	1		1	2	superb Mexican meal
2	1	2	7		2	need iced tea, biscuits inedible
1	1	2	4		2	potatoes too dry, awesome steak
2	2	2	5		1	
2	1	1			3	
2	2	2	5		3	
1	1	1		1	2	delicious Cornish hen and soup, great food
1	1	1	4		2	broccoli soup was great
1	1	2	5		2	food needs to be warmer
2	1	1	7		2	great food
1	1	1			3	
3	2	2	4		3	need non-fat milk, better desserts
2	1	1			2	
3	2	2	3		3	bad desserts
1	1	1	5		2	delicious Mexican meal
1	1	1	7		2	need iced tea
3	3	3	2		3	need better variety
1	1	1			2	good food
2	2	2			2	
1	1	1	9		2	outstanding soup, superb sandwich
2	2	2	5		3	

2	2	3	4		2	food has been cold the past 2 weeks
2	1	2		6	2	
2	2	2	4		2	
2	2	3	5		2	low food quality, gummy rice
2	1	2			2	
1	1	1	4		1	
2	2	2			2	excellent fruit plates
1	1	1	2		2	delicious steak
1	1	2	4		2	
1	1	1	3		2	
1	1	1	7		2	
1	1	1			2	great steak
1	2	2	6		2	
1	1	2			1	
1	2	1			1	
1	1	1		1	2	
2	1	2			2	cold food
2	1	1			2	
1	1	1			2	great food
2	3	2	3		2	no orange slice garnishes, wastes food
1	1	1		5	2	superb shrimp scampi
1	1	1		5	2	excellent scampi
2	1	2	3		3	
1	1	1			2	

1	1	1			2	
2	1	2	6		2	very good lasagne
3	2	2			2	burnt burger, hair in food
2	2	2	3		1	good chicken wings
1	1	1	5		2	
2	3	2			2	no taste in food
3	2	2	4		1	better variety
1	1	1			2	
2	2	2	4		3	
1	1	1	7		2	
2	2	2	4		4	more nutritious food needed
2	2	2			3	
1	2	2	5		2	terrible fried potatoes
2	2	3	3		2	
1	1	1	7		2	better selection needed
2	2	2			2	
2	2	2			2	
2	1	1	5		2	
3	3		4		4	better food quality needed
3	3	2			1	wretched steak
2	2	1			2	
2	2	2	2		2	
2	1	1	3		2	need non-fat cream
2	2	3	4		2	
1	2	2			2	pasta too oily, no taste

2	2	3			2	cold noodles and spaghetti
2	2	3	6		2	cold pasta
1	1	1			2	delicious steak
1	1	2	7		2	need iced tea
2	3	2				add spice to food
1	2	1	7			need iced tea
1	1	1	7		2	outstanding chicken
3	2		5		2	lousy food
3	2	1	3		2	
2	2	2	3		3	
1	1	1	6		1	outstanding food
2	2	2	5		2	
2	2	2			2	
2	2	2	5		2	
1	1	1			4	need more ice cream variety
2	3	2	4		1	need more cereal
3	2	2	3		2	poor variety, need better nutrition
2	2	2	2		2	need more variety
2	1	1	7		2	excellent meal
1	1	2		2	2	
2	2	2	6		2	
2	2	2	7		4	need more variety
2	3	3	4		2	
2	1	1			1	

2	3	3	7		2	vegetables pasty
2	2	1			2	
2	1	1			2	
1	1	1	3		3	
1	1	1	3		3	
1	1	1	8		2	
1	1	1	3		2	
1	1	1		1	2	superb beef and broccoli, excellent soup, best pie
3	3	3	3		4	
2	2	1	2		2	
2	2	2	2		2	
1	1	2		4	2	
1	1	2		5	2	
1	1	1	2		2	
1	1	1	8		2	
1	1	1	4		2	
1	1	2			2	
1	1	1		5	2	
1	2	1			2	
1	2	1		3	2	
2	2	2		5	2	
1	1	1			2	
1	1	1		5	2	superb food
2	1	1		2	2	excellent meatballs
2	2	2		5	4	
1	1	1	7		2	need ice cream

1	1	1			2	
1	1	2		5	2	pie crust tough, good beef and gravy
1	1	1		1	2	superb eggroll
1	1	1	4		2	very good food
2	1	1	2		3	best dinner ever
1	1	1	3		3	best meal ever
1	1	1	5		1	superb
2	2	1			3	
2	2	2			2	
1	1	1			3	
1	1	1	2		3	great meal
1	1	1	3		3	excellent food
1	1	1	2		3	excellent food
1	1	1	5		2	great salad
1	1	1	3		3	tasty meal
2	1	1	3		3	
2	1	1	2		3	excellent food
1	1	1		5	2	
2	2	2			4	
2	2	2			4	
1	1	1			2	
2	2	1	3		1	
1	1	1		5	2	
1	1	1	5		2	
2	2	2			2	
2	2	2	3		3	

2	2	1	2		2	
1	2	2		3	2	bland gravy, overcooked noodles, excellent salad bar
2	2	2			2	fresh burgers
1	1	1		5	2	great prime rib
1	1	1			2	
1	1	1	3		2	
2	2	2	3		4	
2	2	2	3		4	
2	2		2		3	
1	1	1	5		2	
1	2	1		5	2	tasty soup
1	1	1		5	2	excellent food
3	2	2	6		2	
1	3	1	9		2	excellent meal, too much pepper in soup
1	1	1		5	2	
1	1	1		5		
2	2	2	4		1	
1	1	1		5	2	
2	2	3	6		2	cold food
2	2	2	3		2	
1	1	1	2		3	
1	1	1	7		2	excellent food
2	2	2	5		1	
2	1	1	9		2	

1	1	2			1	
1	1	1		5	2	
1	1	1		1	2	soup and vegetables superb
2	1	1	5		2	perfect sandwiches
1	3	1			4	excellent omelet, bad bacon
1	1	1		1	1	
1	1	1	3		3	good T-bone
2	1	2			2	
1	1	1		1	2	magnificent spaghetti

APPENDIX B

Statistics After Prime Vendor Change
September 1996 - February 1997

Food Variety	Food Taste	Food Temperature	Enlisted	Officer	Meal	Comments
1	1	1	5		2	
1	1	1	2		4	
3	2	2	4		1	need more variety
2	1	1			2	fantastic stir fry
2	2	1	2		2	
2	1	1	6		2	
1	1	1				
2	2	1	3		2	generally great, do not boil vegetables
1	1	1	5			excellent meal
2	1	1	4		2	best sandwich in a long time
1	1	1		6	2	
2	1	1			2	
1	1	1		4	2	
2	2	2	5		2	
1	1	1	3		2	
2	2	2	7		2	

1	1	1			2	
1	2	2	2		2	
2	2	1			2	
1	1	1		6	2	excellent catfish
1	1	1	9		2	
1	1	1	7		2	
1	1	1	7		2	
1	1	1	5		2	excellent soup
1	1	1	7		2	delicious soup
2	2	1			2	need more variety
2	2	1	4		2	
2	2	2			2	BBQ pork dry
2	2	2	4		2	more vegetable variety
1	1	1	4		2	
1	1	1			2	good roast
1	1	1	4		2	
1	1	1		5	2	delicious lasagne
1	2	1	3		2	
1	1	2	7		2	
2	2	2	5		2	
2	2	2	4		2	
1	1	1	6		2	great food
1	1	2	7		2	
2	2	2			2	food temperature spotty
1	2	2		1	2	food needs to be hotter
2	2	3	3		2	cold chicken

1	1	2	4		2	food temperature not good
2	2	2	7		2	chicken undercooked and cold, bland macaroni and cheese
2	2	2	2		2	bland food, need better variety
2	3	3		5	2	chicken and broccoli cold
2	2	2	5		2	bland food
2	2	2	4		2	
2	2	2	8		2	
2	2	2	4			
1	1	1			1	very good food
1	1	1		6	2	
1	1	1		6	2	very good
1	1	1	5		2	excellent food
2	2	3			2	cold food
1	1	1	5		2	
2	2	2	6		2	
2	2	2	6		2	soggy fries
1	1	1		5	1	
1	2	1	3		2	
1	1	1		5	2	excellent food
1	1	2	5		2	
1	1	1	2		2	
2	2	2			2	
2	2	3	6		2	food temp questionable
1	1	1	7		2	

2	1	2	2		2	
2	2	2	5		1	
1	1	1	7		2	superb cheesecake
2	1	1			2	
2	1	1	7		2	excellent stir fry
1	1	1	7		2	excellent stir fry
1	1	1	4		2	excellent stir fry
1	1	1	9		2	great meal
1	1	1	9		2	superb fish and salad
1	1	1		1	2	excellent stir fry
1	1	1		5	2	delicious soup
2	2	1	2		2	
1	1	1	7		2	excellent roast beef, corn and rice perfect
1	1	1	5		4	pleasant food
1	1	1		5	2	
2	1	2	7		2	
1	2	2			2	
2	2	2	6		2	
2	1	1	6		2	
2	2	2			2	
1	2	2		4	2	
2	2	2	4		2	
1	1	1	6		3	excellent meal
1	1	1			1	
2	2	2	4		2	
2	2	2			2	

2	2	2	3		1	need jelly variety
1	1	1	9		2	outstanding
3	3		2		3	need better tasting food
1	1	1		5	2	very good liver, juice too sweet
2	2	1		5	2	
1	1	1	4		2	
1	1	1			2	
1	1	1	6		2	excellent chicken fajitas
2	1	2		6	1	
2	1	1		6	1	
1	1	1	7		2	outstanding meal
2	2	2		5	4	
1	1	2	7		2	
1	1	1		5	1	best food ever
3	2	2	4		2	mashed potatoes tasteless
3	2	2	6		2	food cold, need better variety
2	1	1	2		3	
2	2	2			2	
1	1	1			2	
1	1	1	7		2	
1	1	2			2	
2	1	1			2	great food, best catfish
1	1	1	7		2	very good catfish
1	1	1	4		1	
1	1	2	7		2	

1	1	1	7		2	great chicken fajitas
2	1	1	4		2	new burgers are good
2	1	1			4	
1	1	1		5	2	perfect grilled ham and cheese
2	2	1	7		2	
2	2	2			2	
1	1	1	3		2	Jell-O with cream delicious
1	1	1	5		2	great
2	2	2	7		2	
2	2	1	4		2	
2	2	2			2	
1	1	1	6		1	excellent breakfast
2	1	1			1	
1	1	1		5	2	great lunch
1	1	1	2		2	excellent club sandwich
1	1	2		5	2	delicious lasagne, good salad
1	1	1		3	2	
3	3	2	4		2	food portion too small
2	2	2	3		3	
2	2	2			2	
1	1	1			1	
2	2	2			1	
1	1	1			1	
1	1	1	2		2	excellent food

1	1	1	5		2	outstanding soup
1	1	1	9		2	outstanding
2	1	2	4		2	
1	1	1	4		2	
2	2	2	5		2	
2	2	2	4		2	
1	1	1		5	1	perfect pancakes
2	2	2	2		1	
2	2	2	4		1	
1	1	1	3		3	excellent soup
3	2	1	2		3	
2	2	2		1	3	
2	1	1	7		2	
1	1	1	4		3	very good soup
1	2	1	4		2	good club sandwich
2	2	2	6		3	
2	2	2	2		3	
2	3	2	2		3	
1	1	1	4		2	best club sandwich
2	2	2	7		2	
2	2	1	3		2	
2	2	1	4		3	
1	2	2			1	need better cereal selection
1	2	1			2	
1	1	2	6		2	good food most of the time
1	1	1		5	2	great food

1	1	1		3	2	best chicken wings
1	1	2	5		2	quality food
2	1	1			2	excellent soup, raw chicken
2	1	1			3	excellent gravy
3	1	1	5		3	need more cookies
1	1	1	4		2	excellent food
1	1	1	5		2	fantastic club sandwich
1	1	1	5		1	
2	1	1	5		2	
1	1	1	4		2	excellent food
1	1	1			2	tasty prime rib
1	1	1	2		3	excellent food
1	1	1		6	4	good food
1	1	2		6	2	great meals
2	2	2	5		2	
2	2	2	3		3	
1	1	1		5	2	
1	1	1	3		2	best sandwich
1	1	2			2	superb
1	1	1	6		2	
1	1	1			2	
1	1	2	5		2	
1	1	1	6		3	
1	1	2			3	
1	2	2	7		2	
1	1	1			2	great food

1	1	1	3		2	
1	1	2			1	
1	1	1		8	2	
1	1	1			2	scrumptious food
2	2	3			2	
1	2	2		6	2	
2	1	2	2			
1	1	1	5		3	excellent lasagne
1	2	2	4		2	
1	1	1	3		1	eggs need to be cooked longer
1	1	1			2	
2	2	3	4		2	food barely warm
1	1	1			2	
2	1	2			3	
2	2	3		4	2	
1	1	2	5		2	
1	1	1	5		2	great prime rib
1	1	1	2		4	
1	1	2		5	4	
2	1	1	2		2	serve turkey more often
1	1	1		6	4	
1	1	1		5	1	
1	1	1		4	2	great biscuits and gravy
1	1	2		5	4	
2	2	2	9		4	
2	2	2			4	

1	2	2		4	2	
3	3	3	5		2	spaghetti sauce was like ketchup
1	2	2		6	2	
1	2	1	5		2	
1	1	1	6		2	
2	2	3	8		2	cold and soggy fries
2	2	2			3	
2	1	1		6	2	need more choices
2	2	2		2	2	cut fat out more
2	2	2		5	2	tender corned beef, tasty salad, watery potatoes
2	2	2			2	need hot sauce
1	1	1		5	2	
1	1	1		5	2	
1	1	1	6		2	need tomato sauce with spaghetti
2	3	2	6		2	lasagne OK but dry
1	1	2			2	outstanding soup
1	1	1	8		2	great food
1	1	2		5	2	
1	1	1	5		2	
2	1	3				cold vegetables
2	2	3			2	
1	2	2	3		2	
1	2	1	6		2	need meat and tomato sauce with spaghetti
1	1	1		3	2	

2	2	2			2	too many onions in peas
1	1	1			2	
1	1	1			1	
2	2	2			2	need more variety
2	2	2			1	
1	1	1	5		2	great ham
1	1	1	6		2	excellent soup, outstanding fajitas, good vegetables
1	1	1	5		2	fresh salad, cookie variety today
1	1	1	8		2	
1	1	1	5		2	
1	1	2	6		2	excellent food, better variety today, soup not hot
1	1	1			2	
1	1	1	9		2	the best
2	3	1	4		2	too spicy
1	1	1	7		1	
2	2	3	7		2	sauce tasteless
1	1	1	5		2	outstanding fish
1	1	1	5		2	perfect veal
1	2	2	8		2	
1	2	2		5	1	good food
2	2	2		3	1	potatoes too spicy
1	1	1		6	1	
1	1	1	5			excellent ham
2	2	1			2	

1	1	1			1	
2	2	2			2	use less onions, fried chicken raw
1	1	1	7		1	
1	2	2	5		3	soup cold, excellent fruit salad and ham
1	1	1	5		2	excellent lasagne
1	1	1	3		2	soup and fish excellent, fruit salad OK
2	2		4		4	
1	1	1	3		2	
1	1	2		5	1	
1	2	2	5		4	
1	1	1	7		2	
2	1	2			1	
1	1	1	1		3	
1	1	1	7		2	great food, best beef stir fry
1	1	1	3		1	best scrambled eggs
1	1	1			2	great food
1	1	1			4	excellent tasting food
1	1	1			2	delicious beef and rice soup
1	1	1	4		2	excellent soup
1	1	1			2	top of the line soup
1	1	1	7		2	excellent food
2	2	2			2	
1	1	1			4	very good pancakes

3	1	1			3	
2	2	2			2	
1	1		5		2	
1	1	2	7		4	food not tasty
2	1	1		5	1	great hash browns, good muffins
2	1	2		5	1	good, quality bacon
1	1	1		6	4	
2	2	1			2	bland food
2	1	2			4	
1	1	1		4	4	food quality well done
1	2	2	3		4	
1	1	1			2	
1	1	1	5		3	excellent fruit salad
1	1	2			1	
2	2	3	9		1	cold toast, no bagels, orange juice or omelets
2	2	2		6	4	cold bacon and fries
1	1	1	5		2	great chicken fried steak
2	1	2			2	
1	1	1		5	2	excellent
2	2	2			2	good fish
2	1	2			4	
1	1	1		5	2	excellent turkey rice soup
2	2	2		4	4	no pancakes today
1	1	1		6	1	
1	1	1		5	1	

1	1	1		5	1	excellent breakfast
1	1	1		6	1	excellent food
2	2	2		6	4	
2	1	2		6	4	
2	2	2		6	1	
3	2	2		1	1	no biscuits today
2	2	2			2	
2	1	1		4	2	
1	1	2	9		1	
2	2	2	3		2	great food
2	2	1	6		4	
2	1	1		3	4	good
1	1	1	5		2	
1	1	1	5		2	outstanding club sandwich
2	2	2			2	
1	1	1	7		1	
1	1	1	2		4	
1	1	1	7		2	
1	1	1	3		2	delicious club sandwich
1	2	2		8	1	
3	1	1		5	1	hot French toast, delicious omelet, only 2 cereals
2	2	1	1		3	
1	1	1	2		3	
2	2	2	2		4	
2	1	2	5		2	
1	1	1	3		4	

1	1	1		5	1	
2	2	2			2	fish portion too small
3	2	2		6	2	poor variety
2	3	2	3		3	rice undercooked
1	1	1	5		2	excellent club sandwich, good cookies
1	1	1			2	
1	1	2	5		2	
1	1	1	3		3	
1	1	1	5		1	
1	1	1			4	
1	1	1	5		2	
2	2	2		3	2	
1	1	1	7		1	
2	2	2	2		2	no shrimp cocktail sauce, good chicken wings
1	1	1	6		2	as good of food as buffets in Las Vegas
2	2	1	6		2	chili too spicy
1	1	1	2		3	no coffee
1	1	1	2		3	no coffee
2	1	1			2	great salad bar
1	1	1	5		2	
1	2	2	7		2	excellent roast beef, good rice
2	1	1		5		
1	1	1	5		2	
1	1	1	4		3	great

1	1	1	5		2	
1	1	1			2	cobbler tasted like medicine, no ice cream
2	1	2	3		2	
2	1	1	3		3	
1	1	1	3		2	outstanding food variety
3	1	2			2	need better variety
1	1	1	4		2	very good soup
1	1	1	8		2	very good meal
1	1	1	5		2	
2	2	2	4		2	
1	1	1		5	2	good food
2	2	2	7		2	
2	2	2	5		2	
1	1	2			2	good turkey
1	1	1	4		2	liked the turkey club sandwich
1	1	1			2	
2	2	2			2	good club sandwich
1	1	1	6		2	excellent turkey
1	1	1			2	
1	1	1			2	fabulous hamburger
1	1	2	7		2	
2	2	1			2	
2	1	1	7		2	good meal
2	1	1		6	3	
1	1	1	5		2	superb

1	1	1	3		4	
1	1	2	5		2	
2	2	1	4		4	excellent breakfast
1	1	1		5	2	
2	1	2			2	
1	1	1		5	1	delicious ham
2	2	2			2	too much pepper in soup
2	1	1			2	
1	1	1		5	2	
1	1	1	8		2	
1	1	1	3		2	outstanding food
1	1			5	2	delicious cheesecake
2	1	1	8		2	
2	1	1	3		1	food well above standard
1	1	1	5		2	outstanding veal, excellent soup
2	2	2	8		2	
1	1	3		5	2	potatoes cold
3	1	1		5	1	need more cereal variety
2	2	2	3		1	
1	1	1	3		2	delicious soup
2	1	2	3		3	need chips with sandwiches
1	1	1	5		2	tasty meatballs
1	1	1	3		2	excellent club sandwich
2	2	1	4		2	great soups, fresh salad, vegetable burgers needed

1	1			5	2	delicious pie
2	2	1	3		2	
1	2	2	4		1	no orange juice
1	1	1	6		1	no coffee
1	1	1	5		1	phenomenal
1	1	1	5		3	outstanding meal
2	2	2			2	
1	1	1	5		2	
1	2	1	7		2	
1	1	1			2	the best
1	1	1	5		2	great
1	1	1	6		2	
1	1		7		3	fresh fruit
2	2	2	6		3	
1	1	1	6		3	
1	1	2	6		2	
1	1	2			4	excellent desserts, outstanding food
1	1	1	2		3	very good dinner
1	1	1			4	good
1	1	1	5		3	keeps getting better
1	1	1	3		3	
2	2	2		5	2	
1	1	1	9		2	great
1	1	1	3		1	best omelet ever
2	2	2	5		2	
2	2	1		5	1	

1	2	2	8		1	
2	2	1	2		2	
1	1	1		5	1	great breakfast
2	3	2	5		1	
1	1	1	2			excellent food
2	1	1			3	
1	1	1	3		1	

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